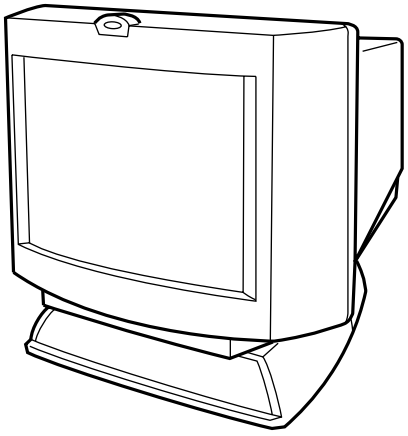
CPD-201VS

SERVICE MANUAL

US Model
Canadian Model

Chassis No. SCC-L21A-A



VAIO

V-3 CHASSIS

SPECIFICATIONS

Picture tube	0.25 mm aperture grille pitch, 17 inches measured diagonally (16.0" viewable), 90-degree deflection, AR coating
Viewable image size	Approx. 327 × 241 mm (w/h) ($12\,^{7}/_{8} \times 9\,^{1}/_{2}$ inches) 16.0" viewing image (measured diagonally)
Max. resolution	Horizontal: Max. 1280 dots Vertical: Max. 1024 lines
VESA standards	640 × 480 at 85 Hz 800 × 600 at 85 Hz 1024 × 768 at 85 Hz 1280 × 1024 at 60 Hz
Deflection frequency	Horizontal: 30 to 70 kHz Vertical: 50 to 120 Hz
Speaker	Left, right: 3.0 W × 2 50 Hz – 20 kHz
Microphones	Uni-directional, electret condenser microphone
Microphones output	3.5 mm miniplug
Audio input	3.5 mm Stereo miniplug, input impedance 47 kΩ, input level 0.7 Vrms typical
Headphones output	Stereo minijack, 15 mW + 15 mW at 16 Ω
Subwoofer output	3.5 mm miniplug, volume variable
Controls	Front panel direct: Audio volume/Contrast/Audio mute/GPE (AUTO/off/mode 1/mode 2) OSD menu: Brightness/Contrast/Picture size/Picture zoom/Picture centering/Sceen moiré/Color temperature (5000K/6500K/9300K/11000K)/Rotation/Pincushion/Pin balance/Keystone/Key balance/Bass boost/Manual Degauss/OSD position/OSD language
AC input voltage/current	100 to 240 V, 50 – 60 Hz, 1.5 – 0.6 A
Power consumption	Max. 120 W
Dimensions	Approx. 415 × 451 × 423 mm (w/h/d) ($16\,^{3}/_{8} \times 17\,^{5}/_{8} \times 16\,^{3}/_{4}$ inches)
Mass	Approx. 19.6 kg (43 lb 3 oz)

Design and specifications are subject to change without notice.

TRINITRON® MULTIMEDIA COMPUTER DISPLAY

SONY®

MICROFILM

DIAGNOSIS

Failure	Power LED
+B Failure	Blink Amber (On 0.5 sec, Off 0.5 sec)
H Stop or V Stop Failure (Included S-Cap Failure)	Blink Amber (On 1.5 sec, Off 0.5 sec)
ABL Failure	Blink Amber (On 0.5 sec, Off 1.5 sec)
Aging/Self-Test	Blink Amber (On 0.5 sec, Off 0.5 sec) .... Blink Green (On 0.5 sec, Off 0.5 sec)
Out of Range	On Green (OSD Indication)

TIMING SPECIFICATION

PRIMARY MODE				PRIMARY					
MODE AT PRODUCTION	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	MODE 6	MODE 7	MODE 8	MODE 9
RESOLUTION	640 X 480	800 X 600	800 X 600	1024 X 768	1024 X 768	1280 X 1024	640 X 400	640 X 480	1152 X 864
CLOCK	36.000 MHZ	40.000 MHZ	49.500 MHZ	78.750 MHZ	94.500 MHZ	108.500 MHZ	25.175 MHZ	25.175 MHZ	80.000 MHZ
— HORIZONTAL —									
H-FREQ	43.269 kHz	37.879 kHz	46.875 kHz	60.023 kHz	68.677 kHz	63.974 kHz	31.469 kHz	31.469 kHz	54.945 kHz
	usec	usec	usec	usec	usec	usec	usec	usec	usec
H. TOTAL	23.111	26.4	21.333	16.66	14.561	15.631	31.778	31.778	18.2
H. BLK	5.333	6.4	5.172	3.657	3.725	3.834	6.356	6.356	3.8
H. FP	1.556	1	0.323	0.203	0.508	0.59	0.636	0.636	0.8
H. SYNC	1.556	3.2	1.616	1.219	1.016	1.18	3.813	3.813	1.4
H. BP	2.222	2.2	3.232	2.235	2.201	2.065	1.907	1.907	1.6
H. ACTIV	17.778	20	16.162	13.003	10.836	11.797	25.422	25.422	14.4
— VERTICAL —									
V. FREQ(HZ)	85.008 Hz	60.317 Hz	75.000 Hz	75.029 Hz	84.997 Hz	60.013 Hz	70.086 Hz	59.940 Hz	59.984 Hz
	lines	lines	lines	lines	lines	lines	lines	lines	lines
V. TOTAL	509	628	625	800	808	1066	449	525	916
V. BLK	29	28	25	32	40	42	49	45	52
V. FP	1	1	1	1	1	1	12	10	6
V. SYNC	3	4	3	3	3	3	2	2	5
V. BP	25	23	21	28	36	38	35	33	41
V. ACTIV	480	600	600	768	768	1024	400	480	864
— SYNC —									
INT(G)	NO	NO	NO	NO	NO	NO	NO	NO	NO
EXT(H/V)/POLARITY	YES -/-	YES +/+	YES +/+	NO +/+	YES +/+	YES +/+	YES -/+	YES -/-	YES +/+
EXT(CS)/POLARITY	NO	NO	NO	NO	NO	NO	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT

98.4.27 VER.

Power Saving Function

This display meets the power saving guidelines set by the International ENERGY STAR Program. It is capable of reduced power consumption when used with a computer equipped with Display Power Management Signaling (DPMS). By sensing the absence of the sync signal coming from the computer, it will reduce the power consumption as follows:

✔ **CAUTION**

The Power Saving function will automatically put the display into Deep Sleep mode if the power switch is turned on without any video signal input. Once the horizontal and vertical syncs are sensed, the display will automatically return to its Normal Operation mode.

Mode	Power consumption	Recovery time	① Power indicator
1 Normal Operation	CPD-101VS: 110 W (max) CPD-201VS: 120 W (max)	—	Green
2 Sleep	15 W (max)	Approx. 3 sec.	Green ⟷ Orange
3 Deep Sleep	8 W (max)	Approx. 10 sec.	Orange
4 Power-off	0 W	—	Off

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

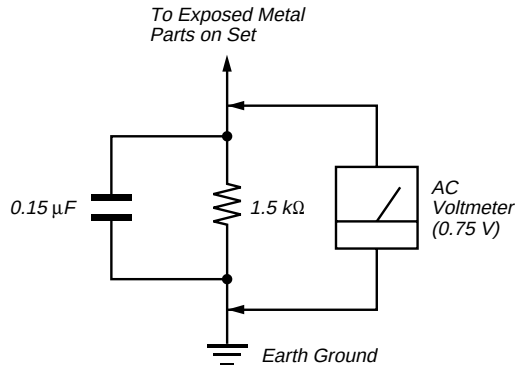


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!

NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVÉE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNE-MENT EST SUSPECTÉ.

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL 1-1

2. DISASSEMBLY

2-1. Cabinet Removal 2-1
2-2. Service Position 2-1
2-3. D Board Removal 2-2
2-4. U Board Removal 2-2
2-5. J Board Removal 2-3
2-6. Picture Tube Removal 2-4
2-7. Harnes Location 2-5

3. SAFETY RELATED ADJUSTMENT 3-1

4. ADJUSTMENTS 4-1

5. DIAGRAMS

5-1. Block Diagrams 5-1
5-2. Frame Schematic Diagram 5-5
5-3. Circuit Boards Location 5-7
5-4. Schematic Diagrams and Printed Wiring Boards ... 5-7
(1) Schematic Diagram of A Board 5-11
(2) Schematic Diagrams of D Board 5-17
(3) Schematic Diagrams of AA, DA, J and U Boards 5-21
5-5. Semiconductors 5-26

6. EXPLODED VIEWS

6-1. Chassis 6-1
6-2. Stand Block 6-2
6-3. Packing Materials 6-3

7. ELECTRICAL PARTS LIST 7-1

SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

Introduction

Congratulations on your purchase of a Sony Multimedia CPD-101VS/201VS display!
This display incorporates over 25 years of Sony experience with Trinitron display technology, ensuring excellent performance and outstanding reliability.
This display's wide scan range (30 – 70 kHz), together with Digital Multiscan Technology, allows it to sync to any video mode from standard VGA through VESA 1024 × 768 at 85 Hz (VESA 1280 × 1024 at 60 Hz).
In addition, its four factory-preset color modes give you unprecedented flexibility in matching on-screen colors to hard copy printouts.
Furthermore, it features:

- Graphic Picture Enhancement function
  improves monitor performance to match the application that you are running.
  With the GPE AUTO MODE, you can use "IntelliLight" compatible software which will maximize the color and brightness of a window running a multimedia presentation without affecting the brightness and contrast of text based applications.
- Integrated stereo speakers with Bass Boost
  enables you to enjoy excellent sound reproduction via 3.0 W stereo speakers.

All together, CPD-101VS/201VS delivers incredible performance with the quality and support you can expect from Sony.

Plug and play

This display complies with DDC™1 and DDC2B which are the Display Data Channel (DDC) standards of VESA.
When a DDC1 host system is connected, the display synchronizes with the V. CLK in accordance with the VESA standards and outputs the EDID (Extended Display Identification Data) to the data line.
When a DDC2B host system is connected, the display automatically switches to DDC2B communication.

DDC™ is a trademark of Video Electronics Standard Association.

Warning on Power Connection

- Use the supplied power cord.
  For the customers in U.S.A.
  If you do not do this, this display will not conform to mandatory FCC standards.
  For the customers in UK.
  If you use the display in the UK, please use the supplied UK cable with the UK plug.

for 100 to 120 V AC **for 220 to 240 V AC** **for 240 V AC only**

- Before disconnecting the power cord, wait at least 30 seconds after turning off the power switch to discharge static electricity from the CRT display surface.
- After the power has been turned on, the CRT is demagnetized for approximately 5 seconds. This generates a strong magnetic field around the bezel which may affect the data stored on magnetic tape or disks near the bezel. Place such magnetic recording equipment and tapes/disks at a distance from this unit.

The socket-outlet shall be installed near the equipment and shall be easily accessible.

Precautions

Installation

- Prevent internal heat build-up by allowing adequate air circulation. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, nor in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place the unit near equipment which generates magnetism, such as a converter or high voltage power lines.

Maintenance

- Clean the cabinet, glass panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzine.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items, like a ball point pen or a screwdriver, as this type of contact may result in a scratched picture tube.

Transportation

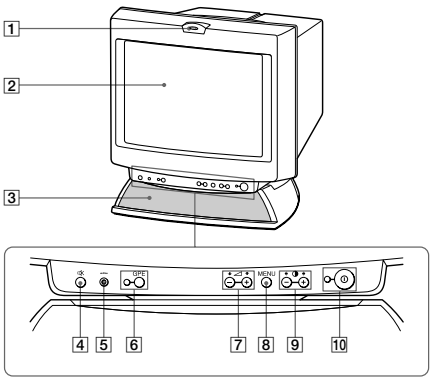
- Do not discard the carton and packing materials. When transporting the unit, use these packing materials so that the unit is properly packaged.
- When carrying the unit, be careful not to get your hands caught between the display and the tilt-swivel.

Continued to the next page →

Functions of Controls

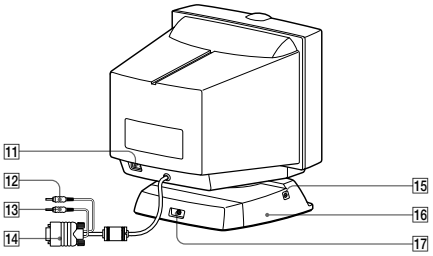
CPD-101VS is used for illustration purposes throughout this manual.

Front



1	**Microphone**	—
2	**Screen**	—
3	**Stereo speakers**	—
4	**Mute button**	Mutes sound (page 20).
5	**Reset switch**	Resets adjustments to factory setting (page 30).
6	**GPE button and indicator**	Sets GPE mode (page 31).
7	**Volume +/– buttons**	Adjust speaker volume (page 19). Use to select items in an OSD.
8	**MENU button**	Displays the OSD menu.
9	**+/– Contrast buttons**	Adjust picture contrast (page 21). Use to adjust items in an OSD.
10	**Power switch and indicator**	Turns the display on and off.

Rear



11	**AC IN connector**	Connect the supplied power cord (page 13).
12	**Audio plug (green)**	Connect to the computer's audio output (page 12).
13	**MIC plug (red)**	Connect to the computer's microphone input (page 12).
14	**Video signal cable (blue)**	Connect to the computer's video output (page 12).
15	**Headphones jack**	Connect standard mini-plug headphones (not supplied). The speakers are turned off when headphones are connected.
16	**Tilt-Swivel**	Adjusts the angle of the display (page 15).
17	**Subwoofer output jack**	Connect to a subwoofer's input (not supplied).

Getting Started

Before using this display, please make sure that the following items are included in your package:

- Multimedia computer display (1)
- Power cord (1)
- Warranty card (1)
- Operating instructions manual (1)
- Windows Monitor Information Disk and its instruction manual (1)

Tip

This display will sync with any IBM or compatible system equipped with VGA[1] or greater graphics capability. Although this display will sync to other platforms running at horizontal frequencies between 30 and 70 kHz, including Macintosh[2] and Power Macintosh systems, a cable adapter is required. Please consult Sony Technical Support for advice on which adapter is suitable for your needs.

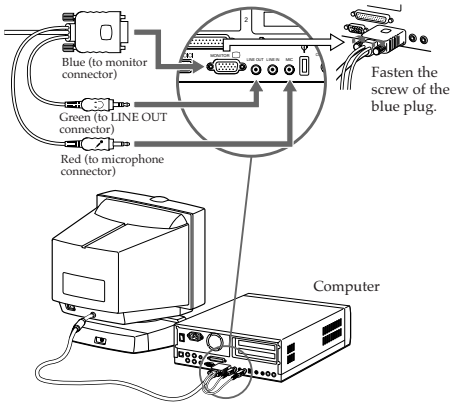
1) VGA is a trademark of IBM Corporation.
2) Macintosh is a trademark of Apple Computer Inc.

Continued to the next page →

Installation

■ Step 1: Connect the computer

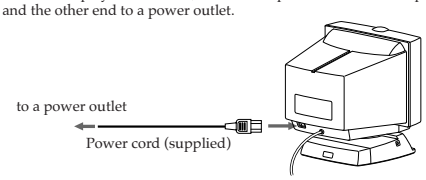
With the computer switched off, connect the video signal cable to the display (VGA) connector on your computer. If your computer supports the DDC plug-and-play standard, this connection will enable DDC communication between the display and the computer.
The video signal cable is combined with audio and microphone cables. If your computer is equipped with sound capability, connect the audio (green) and microphone (red) plugs to appropriate jacks located on your computer.


Blue (to monitor connector)
Green (to LINE OUT connector)
Red (to microphone connector)
Fasten the screw of the blue plug.
Computer

✔**Note on handling the video signal cable**
Do not touch the pins of the video signal cable.

■ Step 2: Connect the power cord

With the display switched off, connect the power cord to the display and the other end to a power outlet.



■ Step 3: Turn on the display, and then your computer.

For proper Plug and Play recognition, turn on the display before you turn on your computer.

✔**Note on Warning Messages**
If there is something wrong with the input signal, one of the following messages appears.

"OUT OF SCAN RANGE"
This indicates that the input signal is not supported by the display's specifications.

"NO INPUT SIGNAL"
This indicates that video signal is missing.

To solve these problems, see "Troubleshooting" on page 36.

■ Step 4: If necessary...

Adjust the user controls according to your personal preference.

The installation of your display is complete. Enjoy your display.

Using Your Display

Preset and user modes

The Multimedia CPD-101VS/201VS display has factory preset modes for the 9 most popular industry standards for true "plug and play" capability.
For less common modes, its Digital Multiscan Technology will perform all of the complex adjustments necessary to ensure a high quality picture for any timing between 30 and 70kHz.

NO.	Resolution (dots × lines)	Horizontal Frequency	Vertical Frequency
1	640 × 400	31.5 kHz	70 Hz
2	640 × 480	31.5 kHz	60 Hz
3	640 × 480	43.3 kHz	85 Hz
4	800 × 600	37.9 kHz	60 Hz
5	800 × 600	46.9 kHz	75 Hz
6	1024 × 768	60.0 kHz	75 Hz
7	1024 × 768	68.7 kHz	85 Hz
8	1152 × 864	54.8 kHz	60 Hz
9	1280 × 1024	64.0 kHz	60 Hz

✔**Note for Windows® 95/98 users**
To maximize the potential of your display, install the new model information file from the supplied Windows® Monitor Information Disk onto your PC.

This display complies with the "VESA DDC" Plug & Play standard. If your PC/graphics board complies with DDC, select "Plug & Play Monitor (VESA DDC)" or this display's model name as the monitor type in the "Control Panel" of Windows® 95/98. If your PC/graphics board has difficulty communicating with this display, load the Windows® Monitor Information Disk and select this display's model name as the monitor type.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

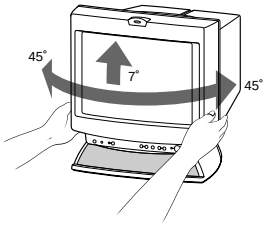
✔**Note on recommended horizontal timing conditions**
Horizontal sync width should be more than 1.0 µsec.
Horizontal blanking width should be more than 3.6 µsec.

■ To enter new timings

When using a video mode that is not one of the 9 factory preset modes, some fine tuning may be required to optimize the display to your preferences. Simply adjust the display according to the adjustment instructions. The adjustments will be stored automatically and recalled whenever that mode is used.
A total of 16 user-defined modes can be stored in memory. If a 17th mode is entered, it will replace the first.

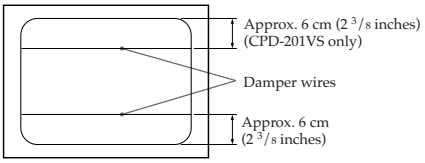
Using the tilt-swivel

With the tilt-swivel, this unit can be adjusted to be viewed at your desired angle within 90° horizontally and 7° vertically.
To turn the unit vertically and horizontally, hold it at its bottom with both hands.
Be careful not to get your hands caught between the display and the tilt-swivel.



Damper wire

Using a white background, a very thin horizontal line on the screen may be visible as shown below. This line is the damper wire.
The Trinitron tube has a vertically striped Aperture Grille inside. The Aperture Grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.
The damper wire is attached to the Aperture Grille to prevent vibration of the Aperture Grille wire so that the screen image is constantly stable.



Adjustments

When one of the preset-type signals is input, no picture adjustment is necessary.
You can, however, adjust the picture to your preference by following the procedure described below.

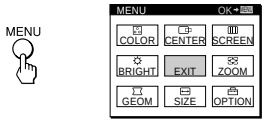
To adjust the display, turn on the display and computer.

Introducing the On-Screen Display

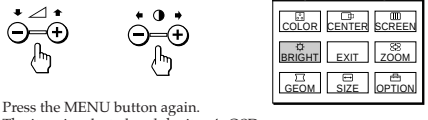
Beyond sound volume and picture contrast adjustment, most adjustments are made using the OSD menu system.

Using the OSD menu

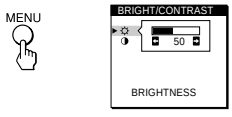
1. Press the MENU button to display the MENU OSD.



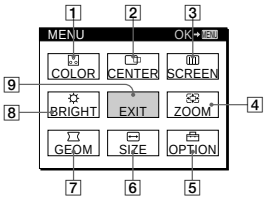
2. Use the the four arrow (↑/↓/←/→) buttons (◿ +/– and ◑ +/– buttons) to select the item you want to adjust.
Change the item from blue to yellow.



3. Press the MENU button again.
The item is selected and the item's OSD appears.



Summary of each item



1 COLOR
Selects the color temperature.

2 CENTER
Adjusts the picture centering.

3 SCREEN
Reduces the moiré pattern.

4 ZOOM
Adjusts the picture size in horizontal and vertical direction proportionally.

5 OPTION
Activates bass-boost and screen degauss, changes the OSD position and selects the OSD language.

6 SIZE
Adjusts the picture size. You can adjust the size in horizontal or vertical direction individually.

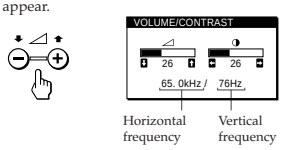
7 GEOM
Adjusts the picture rotation, pincushion, etc.

8 BRIGHT
Adjusts the picture brightness and contrast.

9 EXIT
Closes the OSD menu.

Adjusting the sound volume

1. Press the + or – button.
The VOLUME/CONTRAST OSD appears.
The horizontal and vertical frequencies for each input signal received appear.



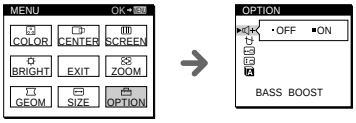
2. Press the **+/–** buttons to adjust volume.
+ to increase volume
– to decrease volume

The VOLUME/CONTRAST OSD disappears three seconds after you release the buttons.

Tips
- Adjust the volume while listening to the sound.
- Excessively high volume may cause howling.

To activate Bass Boost for rich bass sound

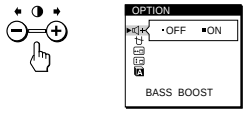
1. Select OPTION in the MENU OSD and press the MENU button.
The OPTION OSD appears.



Continued to the next page

2. Select BASS BOOST with the ↑/↓ buttons.

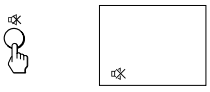
3. Press the → button to select ON.
To cancel bass boost, press the ← button to select OFF.



To exit the OSD
Press the MENU button again.

Tip
If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

To mute the sound
Press the button. The indicator appears while the sound is muted.



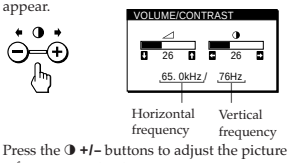
Press again to cancel muting.
You can cancel muting also by pressing the + button.

Tip
appears instead of on the VOLUME/CONTRAST OSD while the sound is muted.

Adjusting the picture contrast

The adjustment data becomes the common setting for all input signals.

1. Press the ◑ + or – button.
The VOLUME/CONTRAST OSD appears.
The horizontal and vertical frequencies for each input signal received appear.



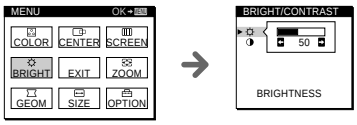
2. Press the ◑ **+/–** buttons to adjust the picture contrast.
+ for more contrast
– for less contrast

The VOLUME/CONTRAST OSD disappears three seconds after you release the buttons.

Adjusting the picture brightness

The adjustment data becomes the common setting for all input signals.

1. Select BRIGHT in the MENU OSD and press the MENU button.
The BRIGHT/CONTRAST OSD appears.



Continued to the next page

2. Press the ←/→ buttons to adjust the picture brightness.
   → for more brightness
   ← for less brightness

To exit the OSD

Press the MENU button again.

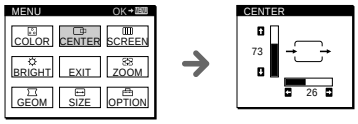
Tip

If you don't touch any buttons the OSD automatically disappears after 30 seconds.

Adjusting the picture centering

The adjustment data becomes the individual setting for each input signal received.

1. Select CENTER in the MENU OSD and press the MENU button.
   The CENTER OSD appears.



2. **For vertical adjustment**
   Press the ↑/↓ buttons.
   ↑ to move up
   ↓ to move down

For horizontal adjustment
Press the ←/→ buttons.
→ to move right
← to move left

To exit the OSD

Press the MENU button again.

Tip

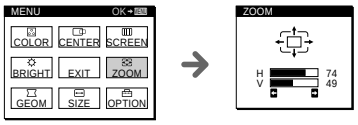
If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

Adjusting the picture size

The adjustment data becomes the individual setting for each input signal received.

To adjust the picture size in horizontal and vertical direction proportionally

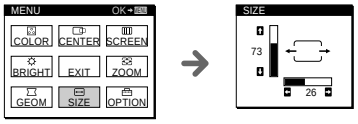
1. Select ZOOM in the MENU OSD and press the MENU button.
   The ZOOM OSD appears.



2. Press the ←/→ buttons for the best size.

To adjust the picture size in horizontal or vertical direction

1. Select SIZE in the MENU OSD and press the MENU button.
   The SIZE OSD appears.



Continued to the next page →

2. **For vertical adjustment**
   Press the ↑/↓ buttons.
   ↑ to increase
   ↓ to decrease

For horizontal adjustment
Press the ←/→ buttons.
→ to increase
← to decrease

To exit the OSD

Press the MENU button again.

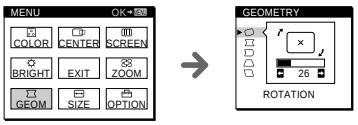
Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

Adjusting the geometry

The rotation adjustment data becomes the common setting for all input signals. All other data becomes the individual setting for each input signal received.

1. Select GEOM in the MENU OSD and press the MENU button.
   The GEOMETRY OSD appears.



2. Press the ↑/↓ buttons to select the item you want to adjust.

3. Press the ←/→ buttons to adjust.

ROTATION	→ to rotate the picture clockwise	← to rotate counterclockwise
PINCUSHION	→ to bend both sides outward	← to bend inward
PIN BALANCE	→ to bend both sides to the right	← to the left
KEYSTONE	→ to widen the top	← to shrink the top
KEY BALANCE	→ to move the top to the right	← to the left.

To exit the OSD

Press the MENU button again.

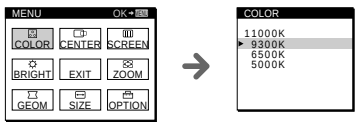
Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

Selecting the color temperature

The selected color temperature becomes the common setting for all input signals.

1. Select COLOR in the MENU OSD and press the MENU button.
   The COLOR OSD appears.



Continued to the next page →

2. Select the desired color temperature with the ↑/↓ buttons.

11000K for the brightest white
9300K for TV white
6500K for video monitor white
5000K for printing paper white

To exit the OSD

Press the MENU button again.

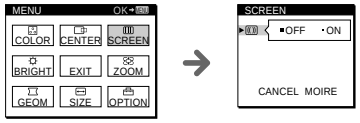
Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

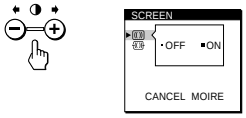
Adjusting the screen moiré

This adjustment is to eliminate wavy or elliptical lines that may appear on the screen.
The adjustment data becomes the common setting for all input signals.

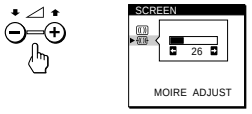
1. Select SCREEN in the MENU OSD and press the MENU button.
The SCREEN OSD appears.



2. Press the ➡ button to select ON.
The MOIRE ADJUST icon appears under the CANCEL MOIRE icon.



3. Press the ↓ button to select MOIRE ADJUST.



4. Press the ⬅/➡ buttons to tune the moiré cancellation effect.

To exit the OSD

Press the MENU button again.

Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

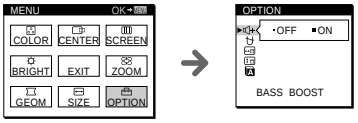
✔Note on the moiré cancellation effect

When CANCEL MOIRE is set to ON, the picture may appear fuzzy. If you set CANCEL MOIRE to OFF, the picture may be clearer, but the moiré will reappear.

Activating screen degauss

The display screen is automatically degaussed (demagnetized) when the power is turned on.
To manually degauss the screen, do as follows. If you need to degauss the screen a second time, wait at least 20 minutes for the best result.

1. Select OPTION in the MENU OSD and press the MENU button.
The OPTION OSD appears.



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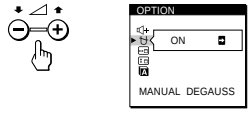
2. Select MANUAL DEGAUSS with the ↑/↓ buttons.



3. Press the ➡ button to activate the degauss cycle.

To exit the OSD

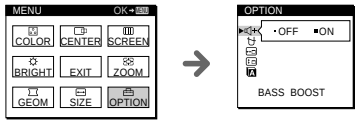
Press the MENU button again.

Tip

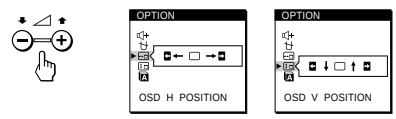
If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

Changing the OSD position

1. Select OPTION in the MENU OSD and press the MENU button.
The OPTION OSD appears.



2. Select OSD H (horizontal) POSITION or OSD V (vertical) POSITION with the ↑/↓ buttons.



3. Press the ⬅/➡ buttons to move the OPTION OSD to the desired position.

To exit the OSD

Press the MENU button again.

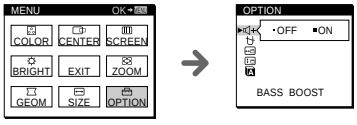
Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

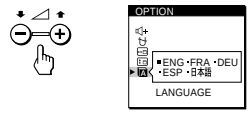
Selecting the OSD language

English, French, German, Spanish and Japanese version of the OSDs are available.

1. Select OPTION in the MENU OSD and press the MENU button.
The OPTION OSD appears.



2. Select LANGUAGE with the ↑/↓ buttons.



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3. Press the ←/→ buttons to select the desired language.

To exit the OSD

Press the MENU button again.

Tip

If you don't touch any buttons, the OSD automatically disappears after 30 seconds.

Resetting

■ To recall the factory settings for an individual adjustment item

1. Select the item you want to reset.
   First select the OSD containing the item in the MENU OSD, and then select the item in the OSD.
2. Press the ⇢ button while the OSD of the item is on.
   Only the item highlighted in yellow returns to the factory setting.

■ To recall the factory settings for the current video mode

Press the ⇢ button while no OSD is displayed.

■ To recall the factory settings for all modes

Press and hold the ⇢ button for more than two seconds.
All adjustments return to the factory settings.

■ MODE 2

Higher contrast and sharpness is applied across the entire screen. MODE 2 is designed to enhance graphic games and movie/video presentations.

✔Note on MODE 2

Whenever the screen resolution is changed, power saving activated, or power turned off, MODE 2 is cancelled and GPE returns to the AUTO mode.

Tip

MODE 2 may produce ghost images when displaying text oriented applications. In this case, select the AUTO or OFF mode.

■ GPE OFF mode

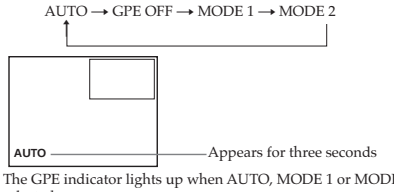
Screen sharpness and brightness are set to standard quality without any additional enhancements. This mode is suited for text-based applications.

✔Note on the GPE OFF mode

Once OFF mode is selected, GPE status stays in the OFF mode until you manually select other GPE modes.

Selecting the GPE mode

Press the GPE button repeatedly until the screen message of the desired mode is displayed.
Each time you press the GPE button, the GPE mode changes as follows:



The GPE indicator lights up when AUTO, MODE 1 or MODE 2 is selected.

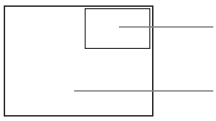
Graphic Picture Enhancement (GPE)

Available GPE modes

Graphic Picture Enhancement is a function designed for your viewing comfort.
There are four GPE modes: AUTO, MODE 1, MODE 2 and OFF.
The default setting is "AUTO."

■ AUTO mode

This mode is effective only with "IntelliLight™" compatible applications. When an image playback window with "IntelliLight" coding appears on the screen, the display senses the exact location and size of the window and applies a higher brightness and sharpness effect to images inside the window, while the rest of the screen remains at standard picture quality. For inquiries about "IntelliLight" and compatible software, check Sony's web site (www.ita.sel.sony.com) or call Sony Technical Support (1-888-4SONYPC).
"IntelliLight™" is a trademark of Sony Electronics Inc.



✔Note on the AUTO mode

If one of the four corners of the "IntelliLight" window is covered or if the window goes beyond the screen border, the GPE effect turns off.

Tip

You can adjust the picture contrast or brightness of the screen outside of the "IntelliLight" window. The "IntelliLight" window always remains clear and sharp regardless of the adjustments made to the rest of the screen.

■ MODE 1

Higher contrast is applied across the entire screen. MODE 1 is designed to enhance still image presentations.

✔Note on MODE 1

Whenever the screen resolution is changed, power saving activated, or power turned off, MODE 1 is cancelled and GPE returns to the AUTO mode.

Power Saving Function

This display meets the power saving guidelines set by the International ENERGY STAR Program. It is capable of reduced power consumption when used with a computer equipped with Display Power Management Signaling (DPMS). By sensing the absence of the sync signal coming from the computer, it will reduce the power consumption as follows:

✔CAUTION

The Power Saving function will automatically put the display into Deep Sleep mode if the power switch is turned on without any video signal input. Once the horizontal and vertical syncs are sensed, the display will automatically return to its Normal Operation mode.

Mode		Power consumption	Recovery time	① Power indicator
1	Normal Operation	CPD-101VS: 110 W (max) CPD-201VS: 120 W (max)	—	Green
2	Sleep	15 W (max)	Approx. 3 sec.	Green ↔ Orange
3	Deep Sleep	8 W (max)	Approx. 10 sec.	Orange
4	Power-off	0 W	—	Off

Troubleshooting

This section may help you isolate a problem and as a result, eliminate the need to contact technical support, allowing continued productivity.

No picture

If the ⏻ indicator is not lit

→ Check that the power cord is properly connected.

→ Check that the ⏻ switch is in the "on" position.

If the "NO INPUT SIGNAL" message appears on the screen, or if the ⏻ indicator is either orange or alternating between green and orange

→ Try pressing any key on the computer keyboard.

→ Check that your computer power switch is in the "on" position.

→ Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets.

→ Ensure that no pins are bent or pushed in the HD15 video input connector.

If the "OUT OF SCAN RANGE" message appears on the screen

→ Check that the video frequency is within that specified for the display.
Horizontal: 30 – 70 kHz
Vertical: 50 – 120 Hz
Refer to your computer's instruction manual to adjust the video frequency range.

→ If you are using a video signal cable adapter, check that it is the correct one.

If no message is displayed and the ⏻ indicator is green or flashing orange

→ See "Self-diagnosis function" (page 39).

No sound from speaker

If the 🔇 indicator is displayed

→ Press the 🔇 button to cancel muting.

→ Check that the audio plug is properly connected.

→ Adjust the volume with 🔊 +/– buttons.

→ Check that the headphones are not connected.

→ Check the volume control, muting, sound selector, etc. of the sound board. (See the computer's manual.)

Microphone mixing is not possible

→ Check that the MIC plug is properly connected.

→ Check the microphone control, sound selector, etc. of the sound board. (See the computer's manual.)

Howling (feedback) is heard

→ Decrease the volume with 🔊 +/– buttons, or turn down the microphone input volume of the sound board.

Picture is scrambled

→ Check your computer manual for the proper display setting.

→ Check this manual and confirm that the graphic mode and the frequency you are trying to operate is supported. Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the display to sync correctly.

Color is not uniform

→ Degauss the display (page 27).
If you place equipment which generates a magnetic field, such as a speaker, near the display, or you change the direction of the display, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

Screen image is not centered or sized properly

→ Adjust the size or centering (pages 22, 23).

→ Some video modes do not fill the screen to the edge. This problem tends to occur with certain video boards.

Edges of the image are curved

→ Adjust the geometry (page 24).

Picture is fuzzy

→ Adjust the contrast and brightness (page 21). Some brands of video boards have an excessive video output level which creates a fuzzy picture at maximum contrast.

→ Degauss the display (page 27).
If you place equipment which generates a magnetic field, such as a speaker, near the display, or you change the direction of the display, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

→ If moiré is cancelled, the picture may become fuzzy. Decrease the moiré cancellation effect (page 26).

→ If the GPE mode is set to AUTO, change it to OFF (page 32).

Continued to the next page →

Picture bounces or has wavy oscillations

→ Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting, laser printers, etc.

→ If you have another display close to this display, increase the distance between them to reduce interference.

→ Try plugging the display into a different AC outlet, preferably on a different circuit.

Picture is flickering

→ Set the refresh rate on the computer to obtain the best possible picture by referring to your computer's manual.

→ If the GPE mode is set to AUTO, change it to OFF (page 32).

Picture appears to be ghosting

→ Eliminate the use of video extensions and/or video switch boxes if this symptom occurs. Excessive cable length or weak connections can produce this symptom.

→ If the GPE mode is set to AUTO, change it to OFF (page 32).

→ If the GPE mode is set to MODE 2, the picture may appear to be ghosting. Set to another GPE mode (page 32).

Wavy or elliptical (moiré) pattern is visible

→ Cancel the moiré (page 26).
The moiré may be modified depending on the connected computer.

→ Due to the relationship between resolution, display dot pitch and the pitch of some image patterns, certain screen backgrounds sometimes show moiré. Change your desktop pattern.

IntelliLight does not work

→ Check that all four corners of the "IntelliLight" window are clearly displayed and are not covered by another window.

→ Check that the GPE mode is set to AUTO (page 32).

→ Leave the display's power "on" and reboot your computer.

→ IntelliLight does not work correctly with an interlaced video mode. Check the vertical refresh rate in the Properties window of Windows 95/98 and select a non-interlaced mode.

Tiny color bars appear in the corners of the IntelliLight window

→ Set the GPE mode to AUTO (page 32).

→ Check that all four corners of the "IntelliLight" window are clearly displayed and are not covered by another window.

A fine horizontal line (wire) is visible

→ This wire stabilizes the vertically striped Aperture Grille (page 16). This Aperture Grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.

Hum is heard right after the power is turned on

→ When the power is turned on, the Auto-degauss cycle is activated. While the Auto-degauss cycle is activated, a hum may be heard. The same hum is heard when the display is manually degaussed. This is not a malfunction.

- If the problem persists, call your authorized Sony dealer from a location near you, or call Sony Technical Support at 1-888-4SONYPC (1-888-476-6972).
- Note the model name and the serial number of your display. Also note the make and name of your computer and video board.

Self-diagnosis function

This display is equipped with a self-diagnosis function. Use this function if there is a problem with your display or computer.

1. Disconnect the video input cable or turn off the connected computer.

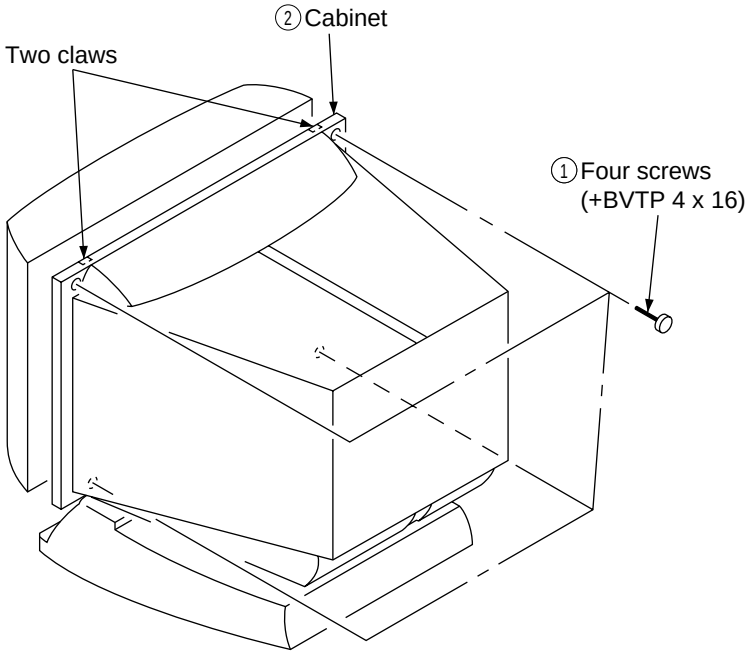
2. Turn the display off and on.

3. Press and hold the ◑➡ button for more than 2 seconds.

If all four color bars appear (white, red, green, blue) after a few seconds, the display is working properly, but there might be a problem with your computer. Contact your computer's manufacturer.
If the color bars do not appear, there might be a problem with the display. Contact your local authorized Sony dealer, or call Sony Technical Support at 1-888-4SONYPC (1-888-476-6972).

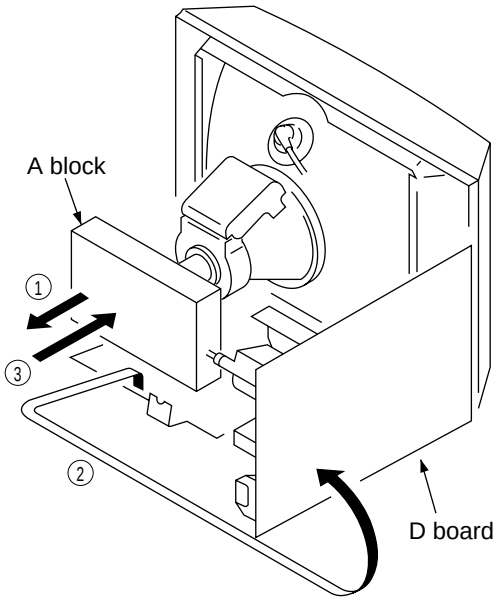
SECTION 2
DISASSEMBLY

2-1. CABINET REMOVAL

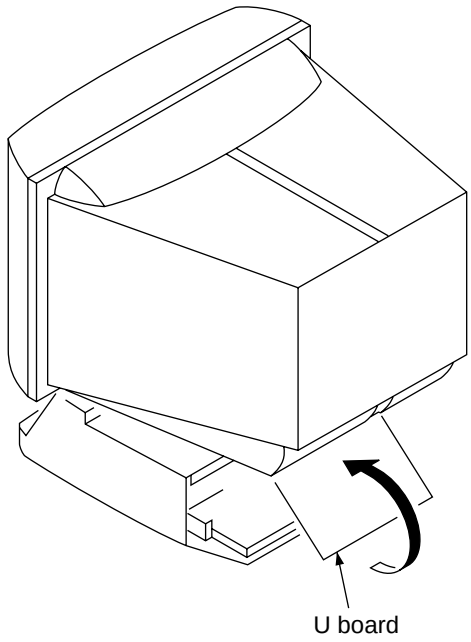


2-2. SERVICE POSITION

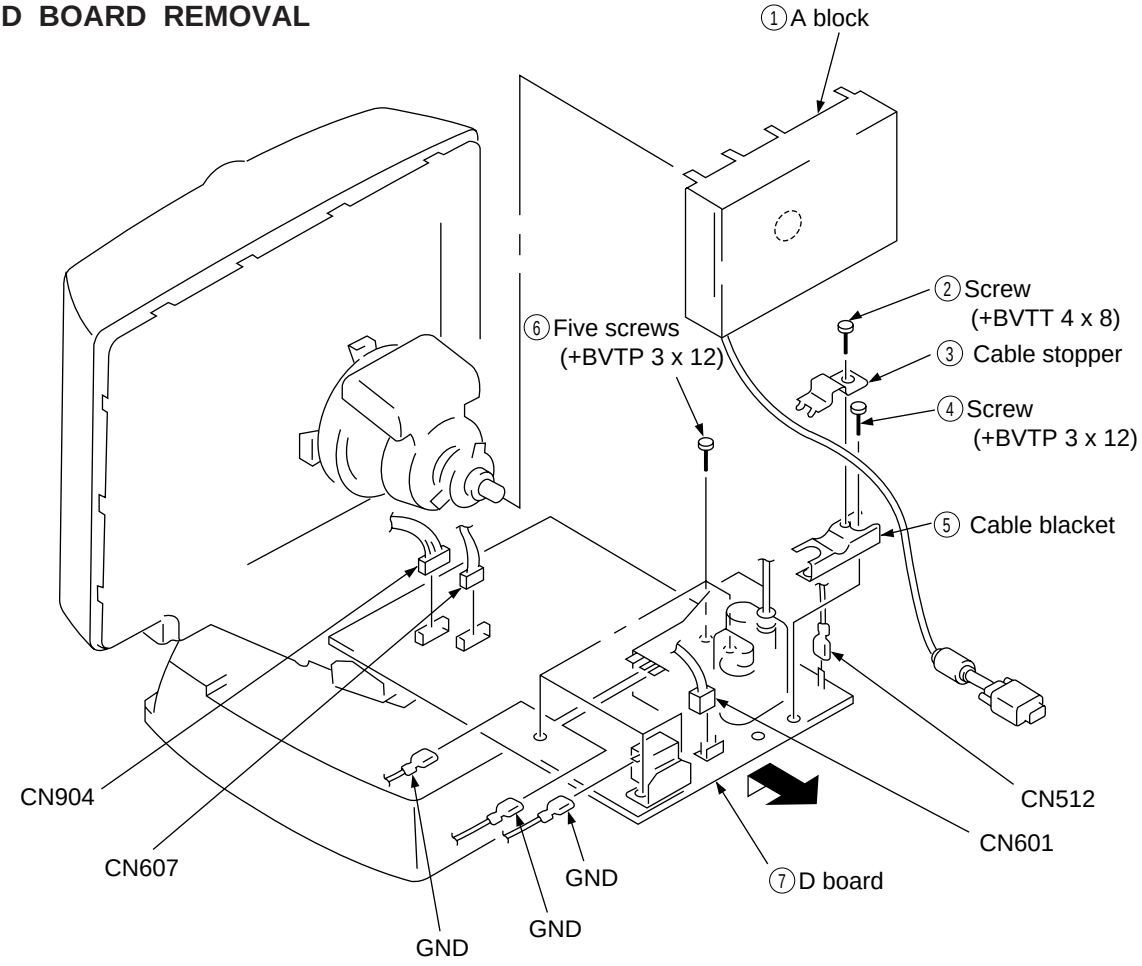
(1) D board



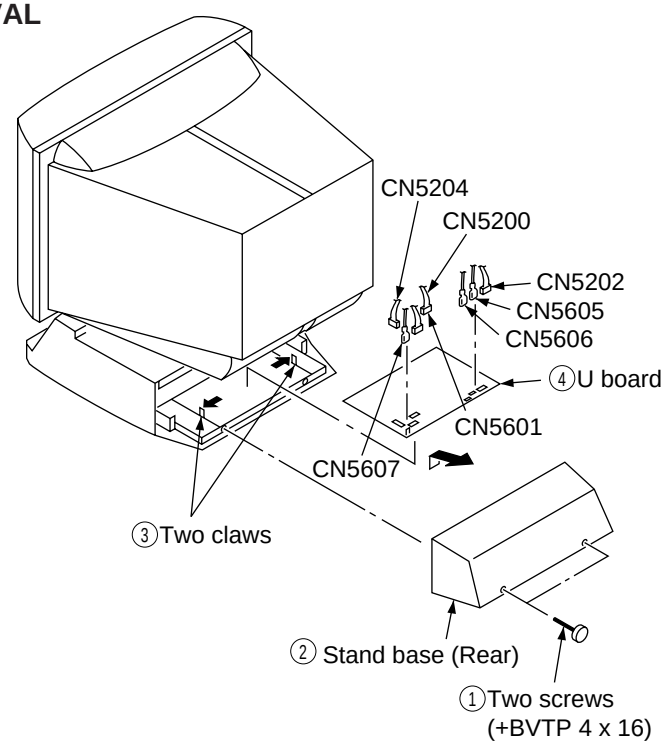
(2) U board



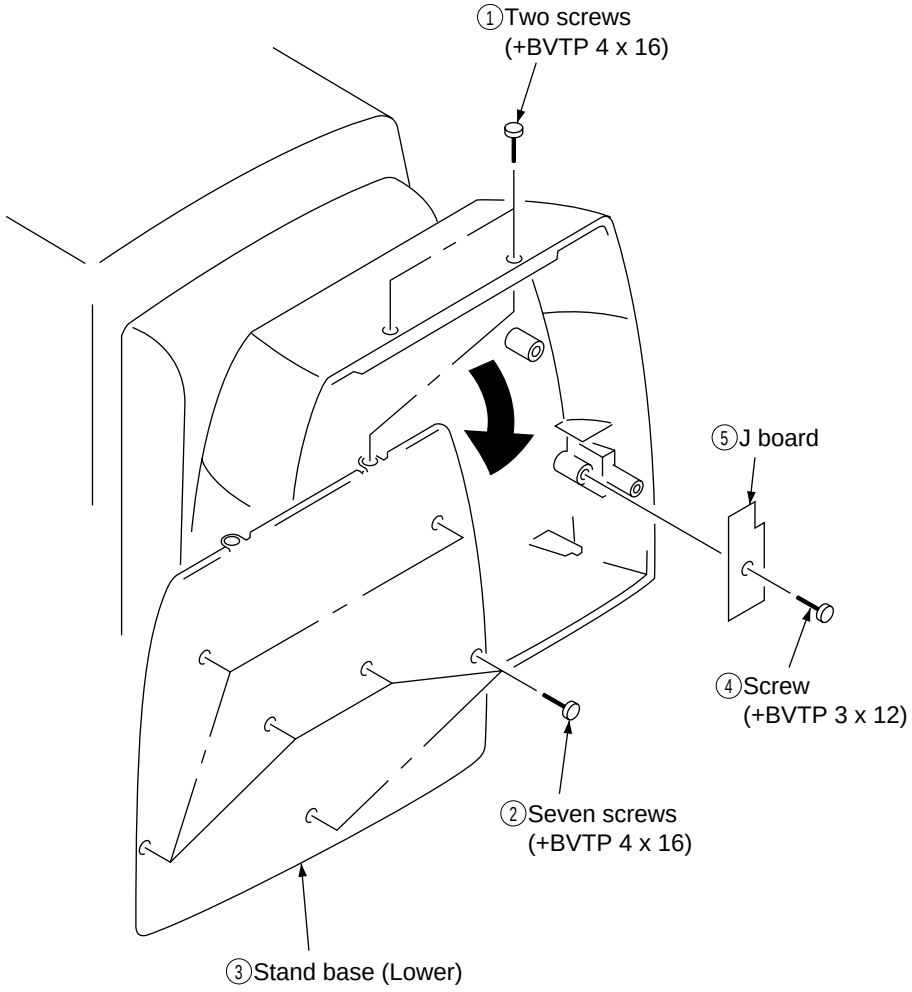
2-3. D BOARD REMOVAL



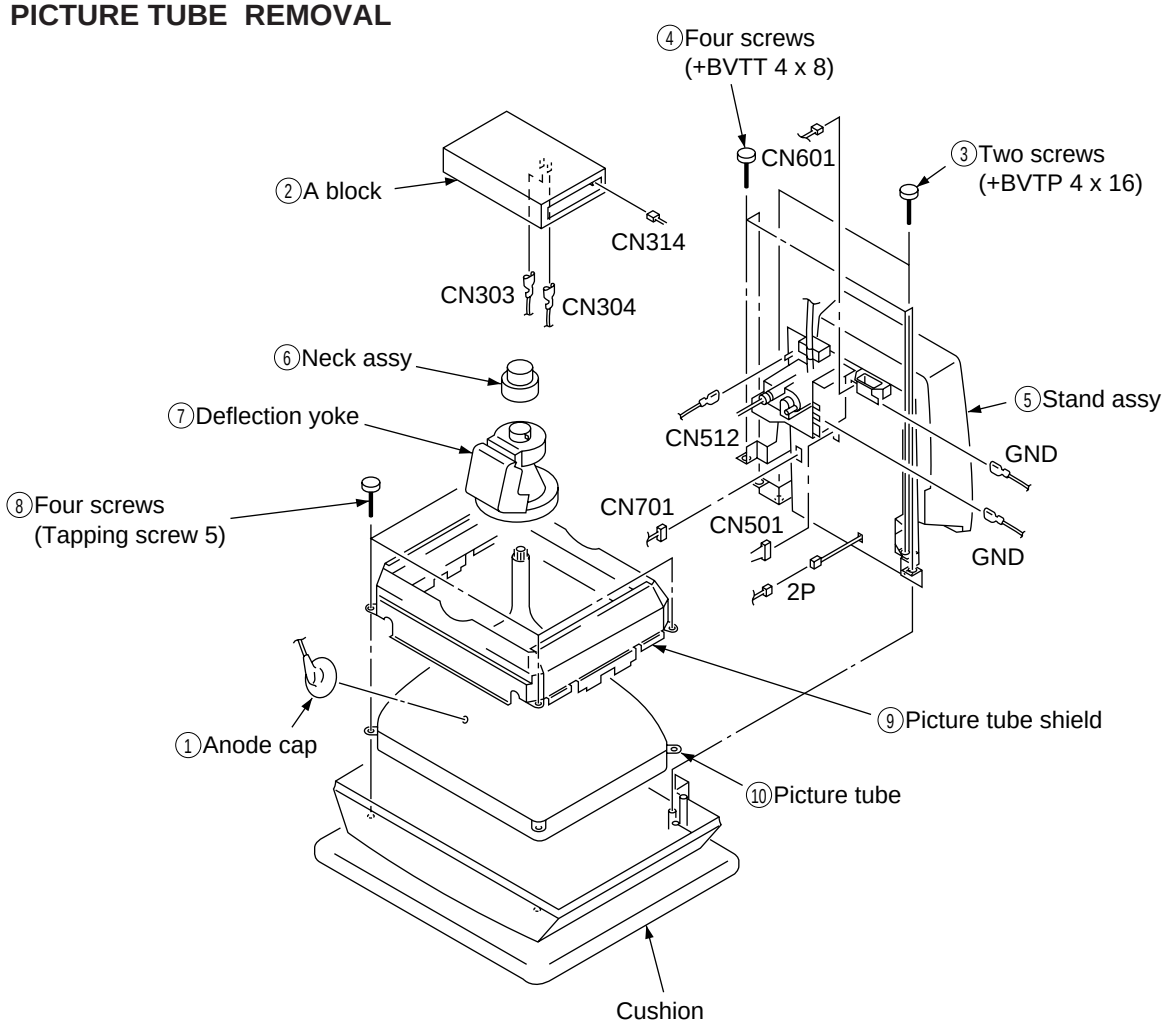
2-4. U BOARD REMOVAL



2-5. J BOARD REMOVAL



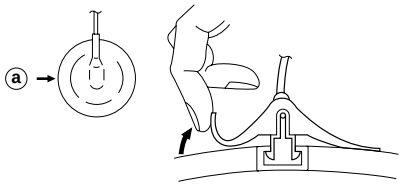
2-6. PICTURE TUBE REMOVAL



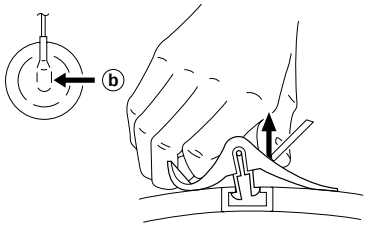
• REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

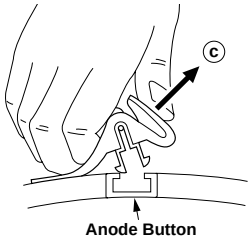
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



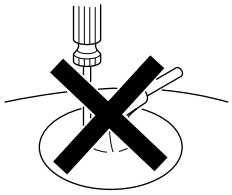
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.

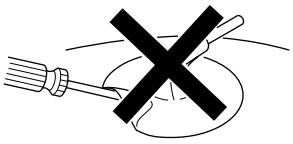


③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

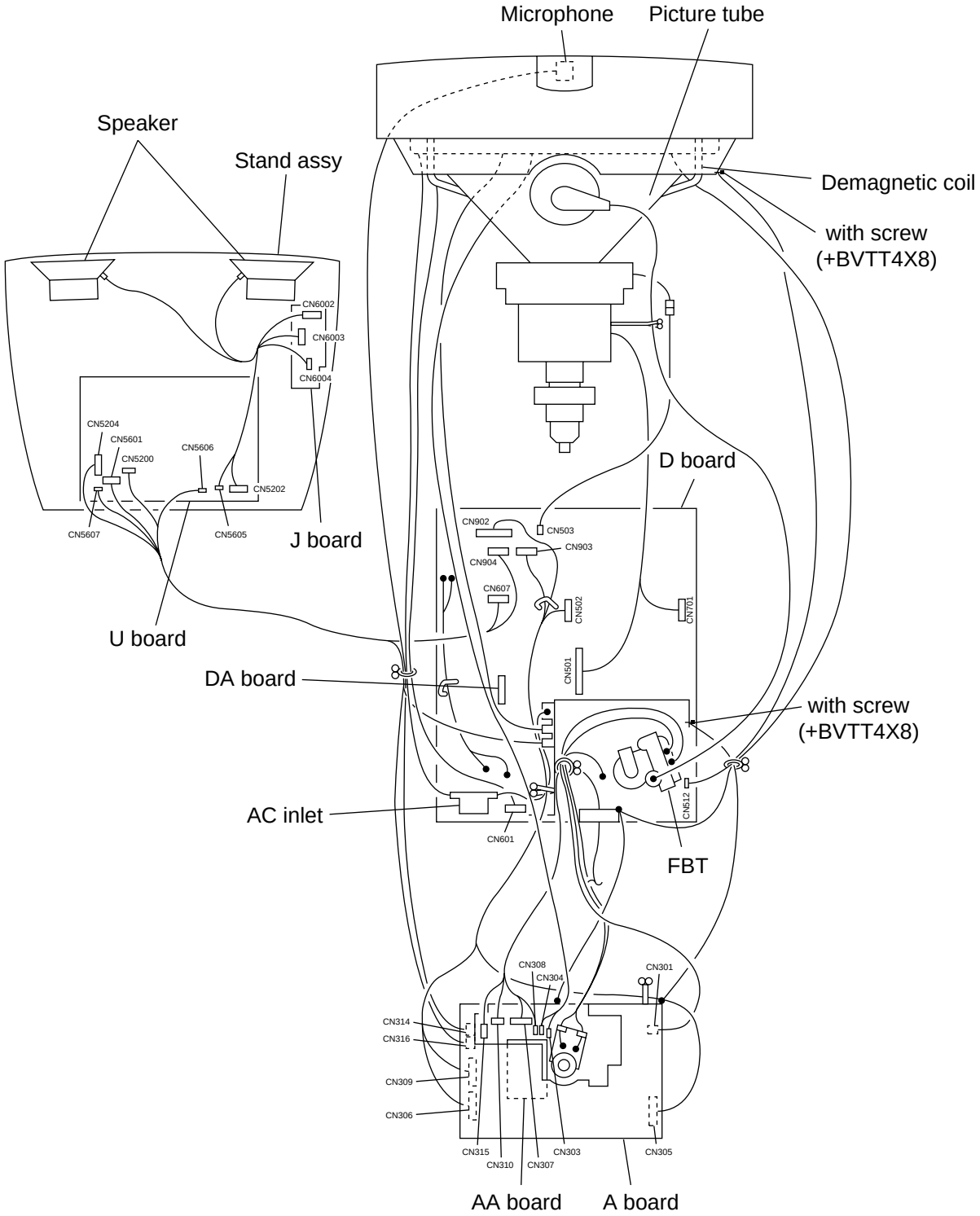
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with shartp shaped material!
② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





2-7. HARNESS LOCATION



SECTION 3
SAFETY RELATED ADJUSTMENT

When replacing or repairing the shown below table, the following operational checks must be performed as a safety precaution against X-rays emissions from the unit.

	Part Replaced (⋈)
HV ADJ	RV501

	Part Replaced (◪)
HV Regulator Circuit Check	D board IC501, C553, C554, C555, C558, C561, R540, R564, R567, RV501, T501 (FBT)
HV Hold-down Circuit Check	D board IC603, IC901, D515, D517, C540, C542, C544, R543, R547, R549, R552, T501 (FBT)
Beam Current Protector Circuit Check	D board IC603, IC604, IC901, C535, C541, R515, R545, R546, R548, R550, R934, T501 (FBT)

∗ Confirm one minute later turning on the power.

- **HV Protector Circuit Check**

Confirm that the voltage between cathode of D517 on D board and GND is more than 28.5 V DC and Using external DC Power Supply, apply the voltage shown below between cathode of D517 and GND, and confirm that the HV HOLD DOWN circuite works. (TV Rester disappears)

Standard voltage : Less than 31.70 V DC

Check Condition

- Input voltage : 100 – 120 V AC
- Input signal : White Cross hatch at Max fH
- Beam control : CONT : 255, BRT : 80

- **Beam Current Protector Check**

Connect a variable resistor (20 kΩ or more) and an ammeter in series between FBT pin ⑪ on D board and –15 V line. Decrease gradually the resistance of the variable resistor from maximum to minimum, and confirm that the Beam Current Protector Circuite works (TV Rester disappears). The current must be within the range shown below.

- Standard current : Less than 1.50 mA

Check Condition

- Input voltage : 100 – 120 V AC
- Input signal : White Cross hatch at Max fH
- Beam control : CONT : 255, BRT : 80

- **B+ Voltage Check**

Standard voltage : 150.0 ± 3.0 V DC

Check Condition

- Input voltage : 100 – 120 V AC

  Note : Use NF power supply or make sure that distortion factor is 3% or less.
- Input signal : White Cross hatch at 64.0 kHz
- Beam control : CONT : 255, BRT : 80

SECTION 4
ADJUSTMENTS

• Landing Rough Adjustment

1. Enter the full white signal. (or the full black dots signal)
2. Set the contrast to "CONT"=MAX.
3. Make the screen monogreen.

Note: Off the outputs from R ch and B ch of SG.

4. Reverse the DY, and adjust coarsely the purity magnet so that a green raster positions in the center of screen.
5. Moving the DY forward, adjust so that an entire screen becomes monogreen.
6. Adjust the tilt of DY, and fix lightly with a clamp.

• Landing Fine Adjustment

< Measurement condition >

Brightness : ∑Ik (819μA)
Magnetic field : BH=0, BV=45μT
CRT size : 312 × 234
Measurement point : 296 × 220
Temperature : 25ºC

After aging for 9 minutes and more than 3 hours, adjust so that it is exactly this value.

a1	a4	a7	[μm]
a2	a5	a8	
a3	a6	a9	

< Adjustment target>

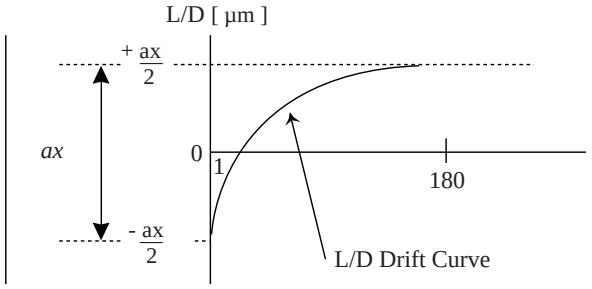
After aging for 1 minute and more than 3 hours, adjust so that it is exactly this value.

$-\frac{a1}{2}$	$-\frac{a4}{2}$	$-\frac{a7}{2}$
$-\frac{a2}{2}$	$-\frac{a5}{2}$	$-\frac{a8}{2}$
$-\frac{a3}{2}$	$-\frac{a6}{2}$	$-\frac{a9}{2}$

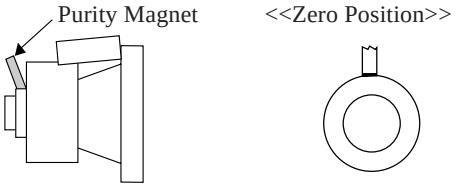
1 minute

$+\frac{a1}{2}$	$+\frac{a4}{2}$	$+\frac{a7}{2}$
$+\frac{a2}{2}$	$+\frac{a5}{2}$	$+\frac{a8}{2}$
$+\frac{a3}{2}$	$+\frac{a6}{2}$	$+\frac{a9}{2}$

3 hours



1. Put the set inside the Helmholtz coil.
2. Input the single green signal.
3. Demagnetize the CRT surface with the hand degausser , and perform auto degaussing.
4. Attach the wobbling coil to the designated part of the CRT neck.
5. Attach the sensor of the landing adjustment unit on the CRT surface.
   Purity magnet position



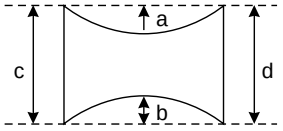
6. Adjust the DY position and purity, and the DY tilt.
   L/D control specification

± 5	± 7	± 5
± 5	± 7	± 5
± 5	± 7	± 5

7. Fasten DY with screw.

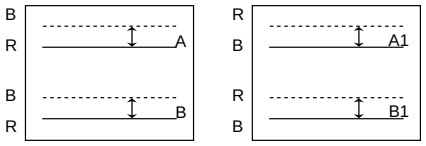
Note: Torque 22 ±2kgcm (2.2 ± 0.2 Nm)
Perform auto degaussing.

8. Adjust each top and bottom pins by two wedges, and also adjust swinging DY neck right-left by H.TILT and horizontal trapezoid, and then fix with two wedges.
   (When fixing DY with wedges, insert wedges completely so that the DY does not shake.)



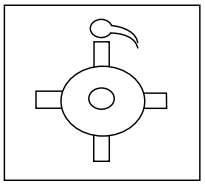
"a" and "b" must be equal, and "c" and "d" must be equal.

Signal : Inverted crosshatch (Make the monogreen)



"A" and "B", "A1" and "B1" must be equal.

<How to drive in wedges>



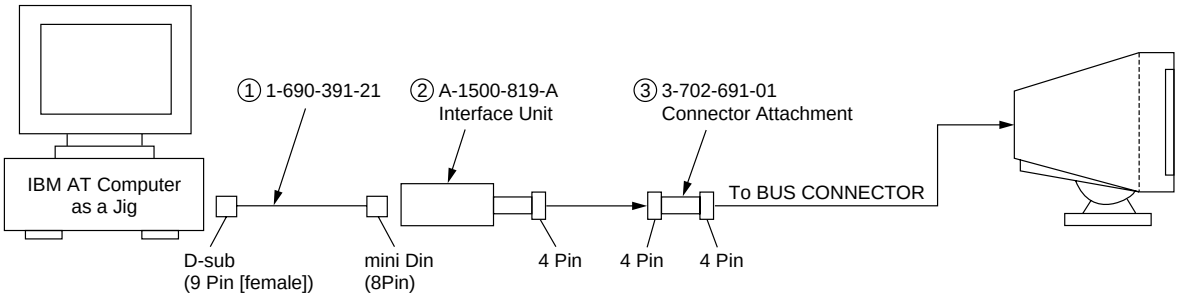
9. Check the landing of each corner, and if they do not satisfy the specification, paste a Disk-Mg onto the funnel and adjust.

Note:

(1) When necessary to paste magnets more than 2 pieces, be careful that the convergence and the distortion would be alterable.
(2) Paste within 80 to 120 mm from the DY on the diagonal line of the magnet.

10. If using the magnet, be sure to demagnetize with the degausser and check.
11. Remove the sensor and wobbling coil.
12. Check that the DY is not tilting.

Connect the communication cable of the computer to the connector located on the D board on the monitor. Run the service software and then follow the instruction.



*The parts above (①~③) are necessary for DAS adjustment.

- **Convergence Rough Adjustment**

1. Enter the white crosshatch signal (white lines on black).
2. Adjust roughly the horizontal and vertical convergence at four-pole magnet.
3. Adjust roughly HMC and VMC at six-pole magnet.
   Standard: ± 0.1mm (In the center of screen)

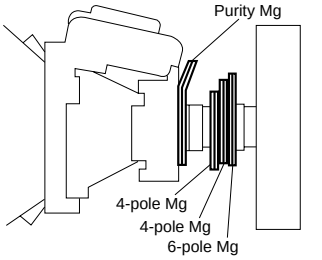


Fig. 1

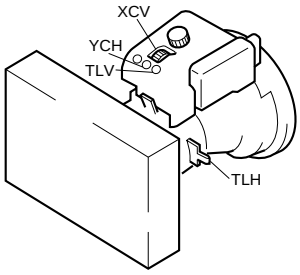
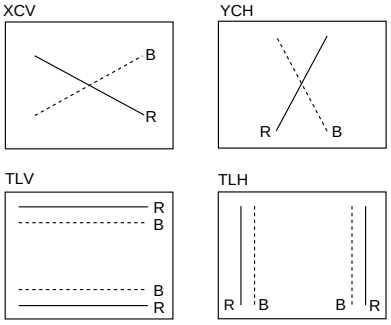


Fig. 2



<6 Pole Magnet>

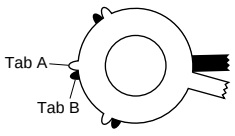


Fig. 3

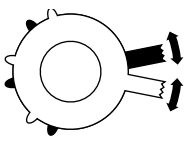


Fig. 4

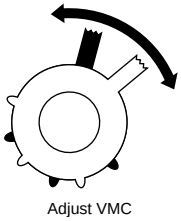
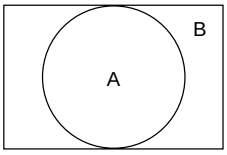


Fig. 5

- **Convergence Specification**



MODE	All mode
A	0.24 mm
B	0.30 mm

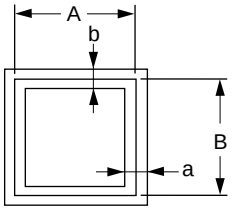
- **White Balance Adjustment Specification**

(1) 11000K
x = 0.274 ± 0.008
y = 0.287 ± 0.008

(2) 9300K
x = 0.283 ± 0.008
y = 0.298 ± 0.008

(3) 5000K
x = 0.345 ± 0.008
y = 0.358 ± 0.008

- **Vertical and Horizontal Position and Size Specification**

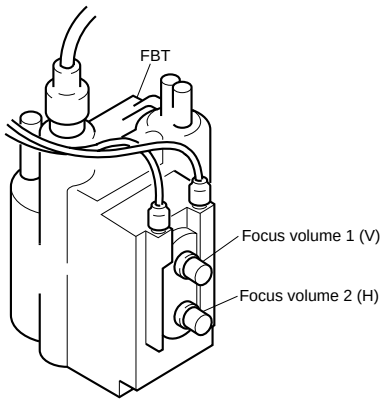


MODE	All mode
A	312 mm
B	234 mm

a ≦ 1.8 mm
b ≦ 1.8 mm

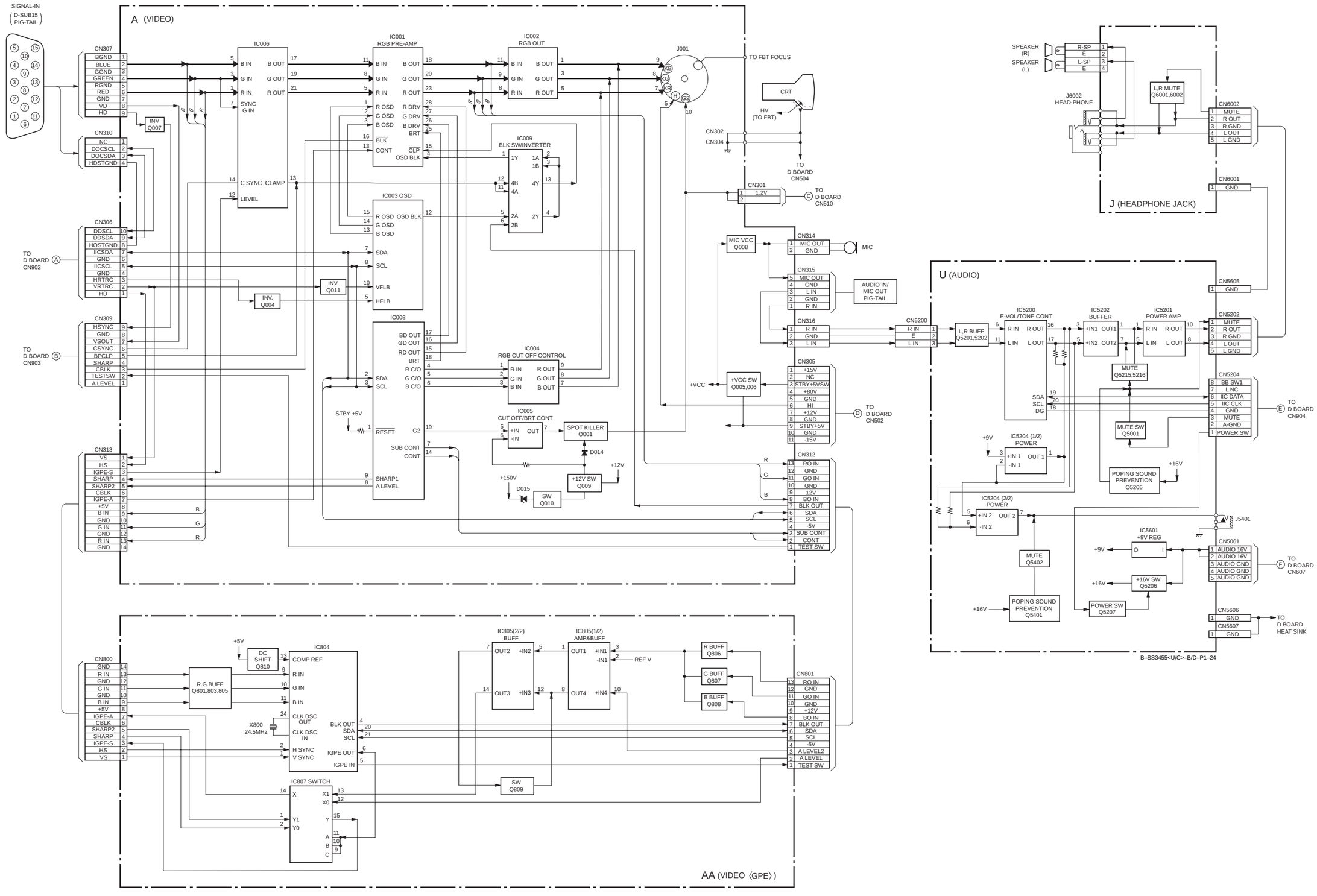
- **Focus adjustment**

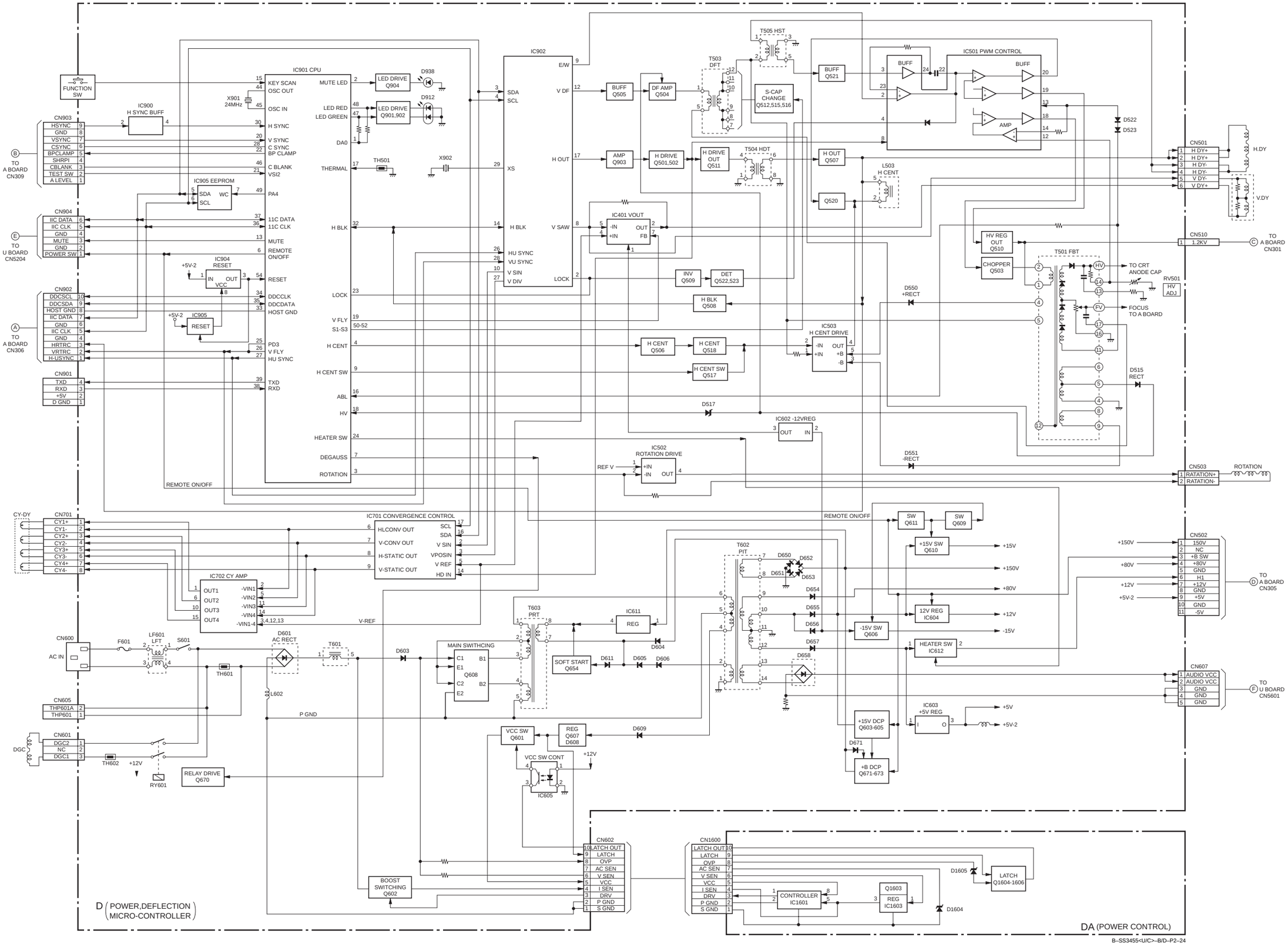
Adjust the focus volume 1 and 2 for the optimum focus.
Standard: HMC, VMC ± 0.1 mm (In the center of screen)



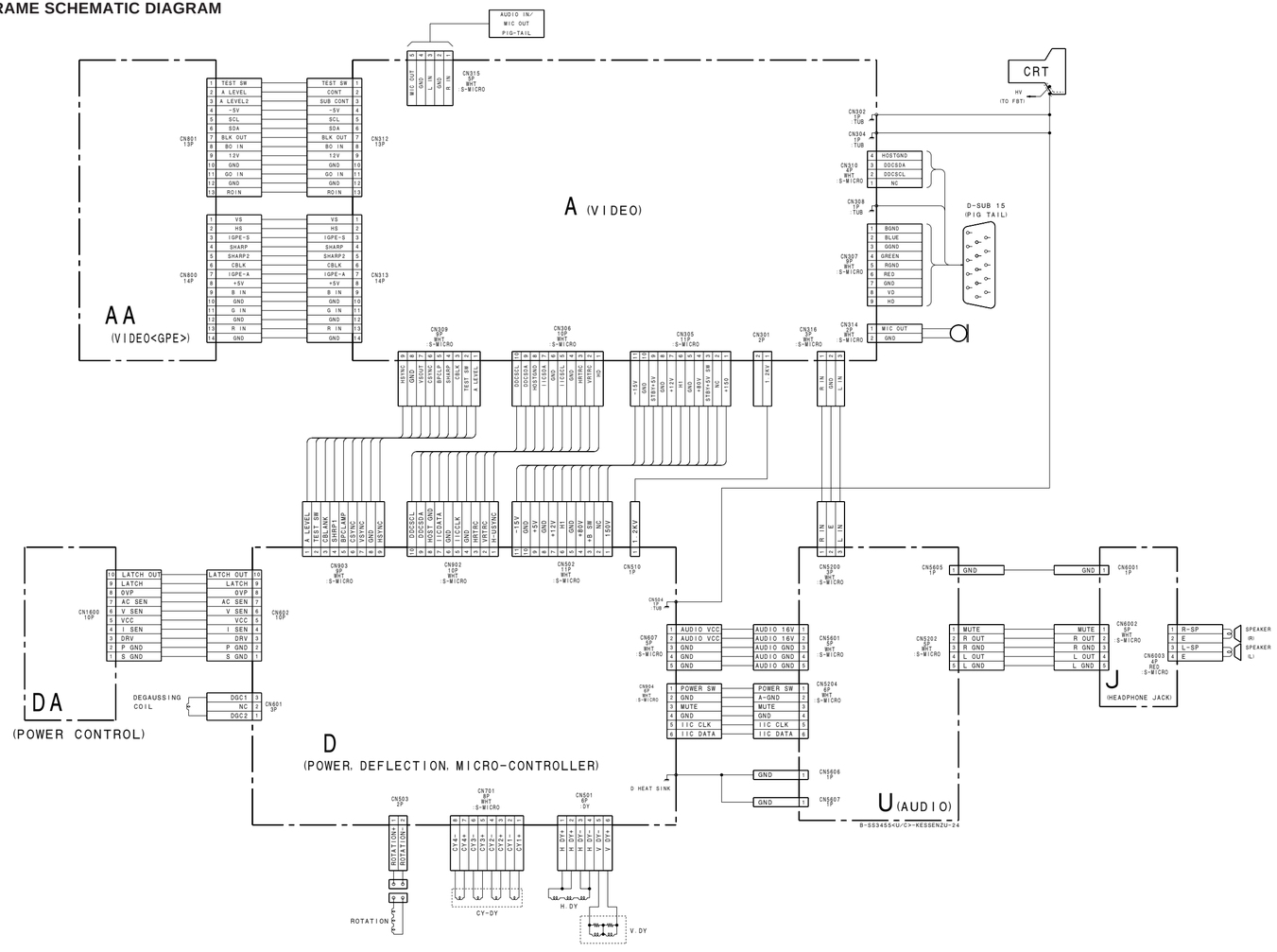
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS

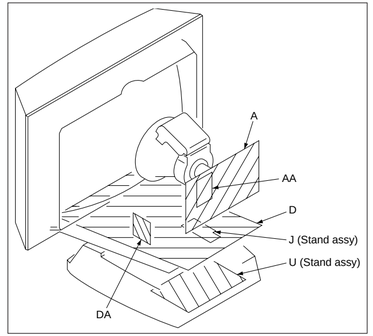



IC901 CPU
KEY SCAN
OSC OUT
OSC IN
H SYNC
V SYNC
C SYNC
BP CLAMP
C BLANK
VSI2
PA4
11C DATA
11C CLK
MUTE
REMOTE ON/OFF
RESET
DDCCLK
DDCDATA
HOST GND
PD3
V FLY
HU SYNC
TXD
RXD
MUTE LED
LED RED
LED GREEN
DAO
THERMAL
H BLK
LOCK
V FLY
S1-S3
H CENT
H CENT SW
ABL
HV
HEATER SW
DEGAUSS
ROTATION
REMOTE ON/OFF
IC902
E/W
V DF
H OUT
V SAW
SDA
SCL
XS
H BLK
HU SYNC
VU SYNC
V SIN
V DIV
LOCK
FUNCTION SW
IC900 H SYNC BUFF
X901 24MHz
X902
TH501
IC905 EEPROM
IC904 RESET
IC905 RESET
LED DRIVE Q904
LED DRIVE Q901,902
D938
D912
CN903
HSYNC
GND
VSYNC
CSYNC
BPCLAMP
SHRPI
CBLANK
TEST SW
A LEVEL
CN904
IIC DATA
IIC CLK
GND
MUTE
GND
POWER SW
CN902
DDCSCL
DDCSDA
HOST GND
IIC DATA
GND
IIC CLK
GND
HRTRC
VRTRC
H-USYNC
CN901
TXD
RXD
+5V
D GND
TO A BOARD CN309
TO U BOARD CN5204
TO A BOARD CN306
T505 HST
T503 DFT
T504 HDT
T602 PIT
T603 PRT
T601
T501 FBT
T502 ROTATION DRIVE
BUFF Q505
DF AMP Q504
AMP Q903
H DRIVE Q501,502
H DRIVE OUT Q511
S-CAP CHANGE Q512,515,516
BUFF Q521
H OUT Q507
Q520
L503 H CENT
IC501 PWM CONTROL
BUFF
AMP
D522
D523
IC401 VOUT
INV Q509
DET Q522,523
H BLK Q508
H CENT Q506
H CENT Q518
H CENT SW Q517
IC503 H CENT DRIVE
D517
IC602 -12VREG
D550 +RECT
D551 -RECT
D515 RECT
HV REG OUT Q510
CHOPPER Q503
RV501 HV ADJ
TO CRT ANODE CAP
FOCUS TO A BOARD
CN501
H DY+
H DY+
H DY-
H DY-
V DY-
V DY+
H.DY
V.DY
CN510
1.2KV
TO A BOARD CN301
CN503
RATATION+
RATATION-
ROTATION
IC701 CONVERGENCE CONTROL
HLCONV OUT
V-CONV OUT
H-STATIC OUT
V-STATIC OUT
SCL
SDA
V SIN
VPOSIN
V REF
HD IN
IC702 CY AMP
CY-DY
CN701
CY1+
CY1-
CY2+
CY2-
CY3+
CY3-
CY4+
CY4-
REMOTE ON/OFF
SW Q611
SW Q609
+15V SW Q610
12V REG IC604
-15V SW Q606
HEATER SW IC612
+15V DCP Q603-605
+B DCP Q671-673
IC603 +5V REG
D671
+15V
+150V
+80V
+12V
-15V
+5V
+5V-2
CN502
150V
NC
+B SW
+80V
GND
H1
+12V
GND
+5V
GND
-5V
TO A BOARD CN305
CN607
AUDIO VCC
AUDIO VCC
GND
GND
GND
TO U BOARD CN5601
CN600
AC IN
F601
LF601 LFT
S601
TH601
D601 AC RECT
L602
T601
D603
MAIN SWITCHING
Q608
SOFT START Q654
IC611 REG
D604
D605
D606
D611
P GND
CN605
THP601A
THP601
CN601
DGC
DGC2
NC
DGC1
TH602
+12V
RY601
RELAY DRIVE Q670
VCC SW Q601
REG Q607 D608
D609
VCC SW CONT
IC605
BOOST SWITCHING Q602
V-REF
CN602
LATCH OUT
LATCH
OVP
AC SEN
V SEN
VCC
I SEN
DRV
P GND
S GND
CN1600
CONTROLLER IC1601
Q1603 REG IC1603
D1604
D1605
LATCH Q1604-1606
D650
D651
D652
D653
D654
D655
D656
D657
D658
D (POWER,DEFLECTION MICRO-CONTROLLER)
DA (POWER CONTROL)
B–SS3455<U/C>–B/D–P2–24

5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



	Part replaced (⋈)
HV ADJ	RV501

		Part replaced (◪)
HV Regulator Circuit Check	D Board	IC501, C553, C554 C555, C558, C561 R540, R564, R567 RV501, T501 (FBT)
HV Hold-down Circuit Check	D Board	IC603, IC901, D515 D517, C540, C542 C544, R543, R547 R549, R552, T501 (FBT)
Beam Current Protector Circuit Check	D Board	IC603, IC604, IC901 C535, C541, R515 R545, R546, R548 R550, R934, T501 (FBT)

5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted. (pF: µµF) Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ∗ : Can not be measured.
- Circled numbers are waveform references.
- ——— : B + bus.
- – – – : B – bus.
- The components identified by ⋈ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. (See page 3-1)
- When replacing the part in below table, be sure to perform the related adjustment.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Terminal name of semiconductors in silk screen printed circuit (∗)

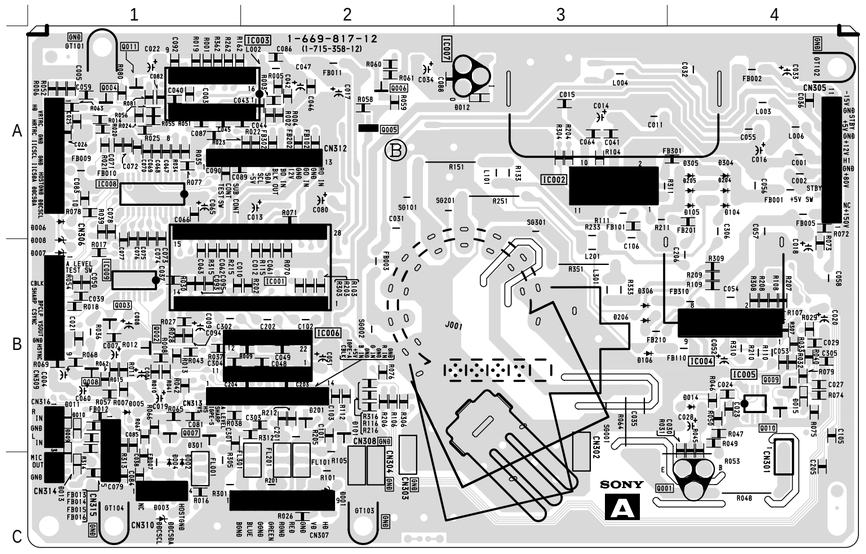
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode Anode Cathode Anode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		□ Source □ Drain □ Gate	
⑯	Transistor		□ Emitter □ Collector □ Base	
–	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

Ver.1.5

Note: Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

— A BOARD (Conductor Side) —



A [VIDEO]

- **A BOARD SEMICONDUCTOR LOCATION**

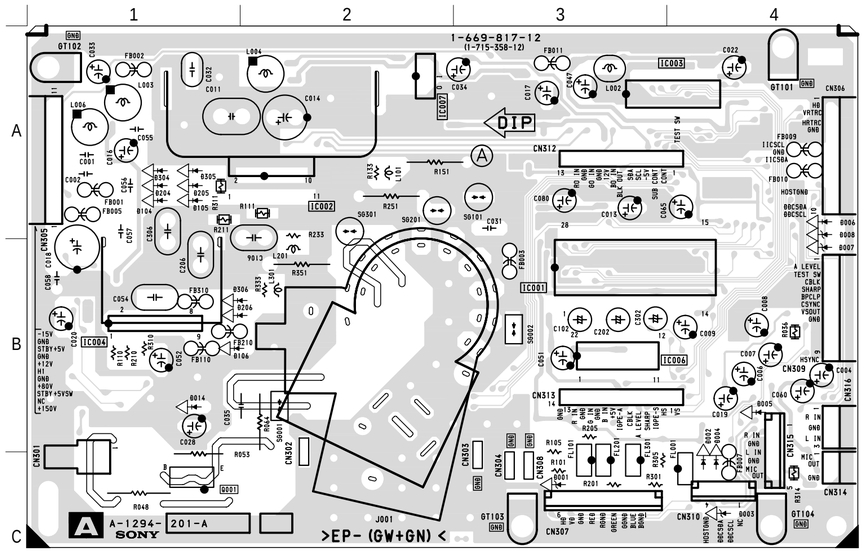
IC	(Conductor Side)	(Component Side)
IC001	B–2	B–3
IC002	A–3	A–2
IC003	A–2	A–4
IC004	B–4	B–1
IC005	B–4	
IC006	B–2	B–3
IC008	A–1	
IC009	B–1	

TRANSISTOR	(Conductor Side)	(Component Side)	✻
Q001	C–4	C–1	–
Q004	A–1		①
Q005	A–2		②
Q006	A–2		③
Q007	B–1		①
Q008	B–1		①
Q009	B–4		①
Q010	B–4		①
Q011	A–1		①

DIODE	(Conductor Side)	(Component Side)	✻
D001	C–2	C–3	–
D003	C–1	C–4	–
D005	B–1	B–4	–
D006	A–1	A–4	–
D007	B–1	B–4	–
D008	B–1	B–4	–
D009	B–1		③
D013	C–1		③
D014	B–4	B–1	–
D015	B–4		③
D101	B–2		⑥
D104	A–4	A–1	–
D105	A–4	A–1	–
D106	B–3	B–2	–
D201	B–2		⑥
D204	A–4	A–1	–
D205	A–4	A–1	–
D206	B–3	B–2	–
D301	B–1		⑥
D304	A–4	A–1	–
D305	A–4	A–1	–
D306	B–3	B–2	–

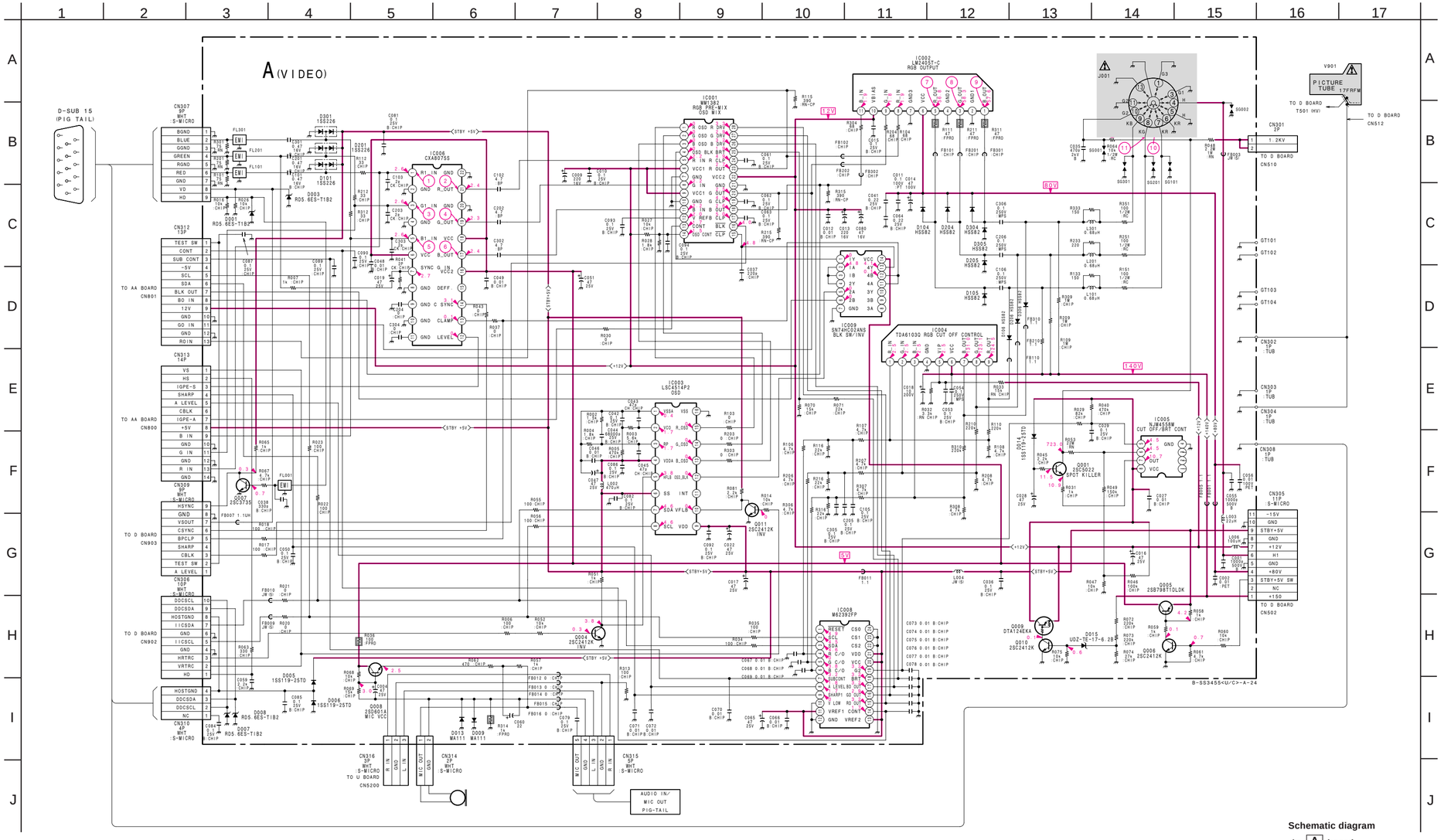
✻: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

— A BOARD (Component Side) —



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

(1) Schematic Diagram of A Board



Schematic diagram

◀ A board

• A BOARD WAVEFORMS

① 0.7 Vp-p (H)	② 0.7 Vp-p (H)
③ 0.7 Vp-p (H)	④ 0.7 Vp-p (H)
⑤ 0.7 Vp-p (H)	⑥ 0.7 Vp-p (H)
⑦ 46.0 Vp-p (H)	⑧ 46.0 Vp-p (H)
⑨ 46.0 Vp-p (H)	⑩ 46.0 Vp-p (H)
⑪ 46.0 Vp-p (H)	⑫ 46.0 Vp-p (H)

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

• D BOARD SEMICONDUCTOR LOCATION

IC

IC401	B-4	
IC501	A-6	
IC502	C-6	
IC503	B-3	
IC602	B-5	
IC603	C-5	
IC604	C-4	
IC605	D-3	
IC611	E-6	
IC612	D-6	
IC701	A-5	
IC702	A-4	
IC900	D-6	
IC901	C-6	
IC902	B-6	
IC904	B-7	
IC905	B-6	

TRANSISTOR

		*
Q501	A-6	①
Q502	A-6	①
Q503	C-1	–
Q504	A-1	–
Q505	A-6	–
Q506	C-6	–
Q507	B-3	–
Q508	C-3	–
Q509	A-6	①
Q510	C-1	–
Q511	A-4	–
Q512	B-5	–
Q515	B-5	–
Q516	B-5	–
Q517	B-5	–
Q518	B-5	–
Q520	C-3	–
Q521	B-5	–
Q522	A-6	①
Q523	A-6	①
Q601	E-3	–
Q602	E-3	–
Q603	D-5	①
Q604	D-5	①
Q605	D-5	①
Q606	C-6	–
Q607	E-4	–
Q608	E-3	–
Q609	C-6	①
Q610	C-6	–
Q611	C-5	①
Q654	E-5	–
Q670	C-3	–
Q671	C-4	–
Q672	C-4	①
Q673	C-4	①
Q901	E-7	①
Q902	E-7	①
Q903	B-6	①
Q904	B-7	①
Q905	B-6	①

DIODE

		*
D401	C-4	–
D402	C-4	–
D403	B-5	③
D404	C-4	③
D405	C-5	–
D501	A-4	–
D502	B-3	–
D503	B-5	–
D504	C-2	–
D506	C-3	–
D507	C-4	–
D508	A-6	–
D509	C-1	–
D510	C-2	–
D511	B-2	–
D512	B-3	–
D513	C-1	–
D514	A-3	–
D515	A-1	–
D516	C-2	–
D517	A-1	–
D518	C-3	–
D520	C-2	–
D521	C-2	–
D522	A-7	–
D523	A-7	–
D524	C-3	–
D525	C-3	–
D526	C-6	–
D527	C-3	–
D550	B-2	–
D551	B-2	–
D601	D-2	–
D603	E-3	–
D604	D-6	–
D605	E-5	③
D606	E-5	–
D607	E-5	–
D608	E-5	–
D609	E-4	–
D611	E-5	–
D612	E-4	–
D613	E-4	–
D614	E-4	–
D615	E-4	–
D618	B-5	③
D619	E-6	③
D621	E-6	③
D622	D-5	③
D623	D-5	③
D624	D-6	③
D650	D-4	–
D651	D-4	–
D652	D-3	–
D653	D-4	–
D654	D-4	–
D655	D-5	–
D656	D-5	–
D657	D-5	–
D658	D-5	–
D662	D-4	–
D670	C-2	–
D671	C-4	–
D701	A-5	③
D704	A-5	③
D901	E-7	③
D902	C-6	③
D903	D-6	③
D904	D-6	③
D905	D-7	③
D906	D-7	③
D907	E-6	③
D908	D-6	③
D909	D-6	③
D910	D-6	③
D911	D-6	③
D912	E-7	–
D914	D-6	③
D915	D-6	③
D916	D-6	③
D917	D-6	③
D918	D-6	③
D919	C-6	③
D920	B-7	–
D922	D-6	③
D924	C-6	③
D925	C-6	③
D935	D-6	③
D936	E-7	③
D937	E-7	③
D938	A-7	–
D939	A-6	–

VARIABLE RESISTOR

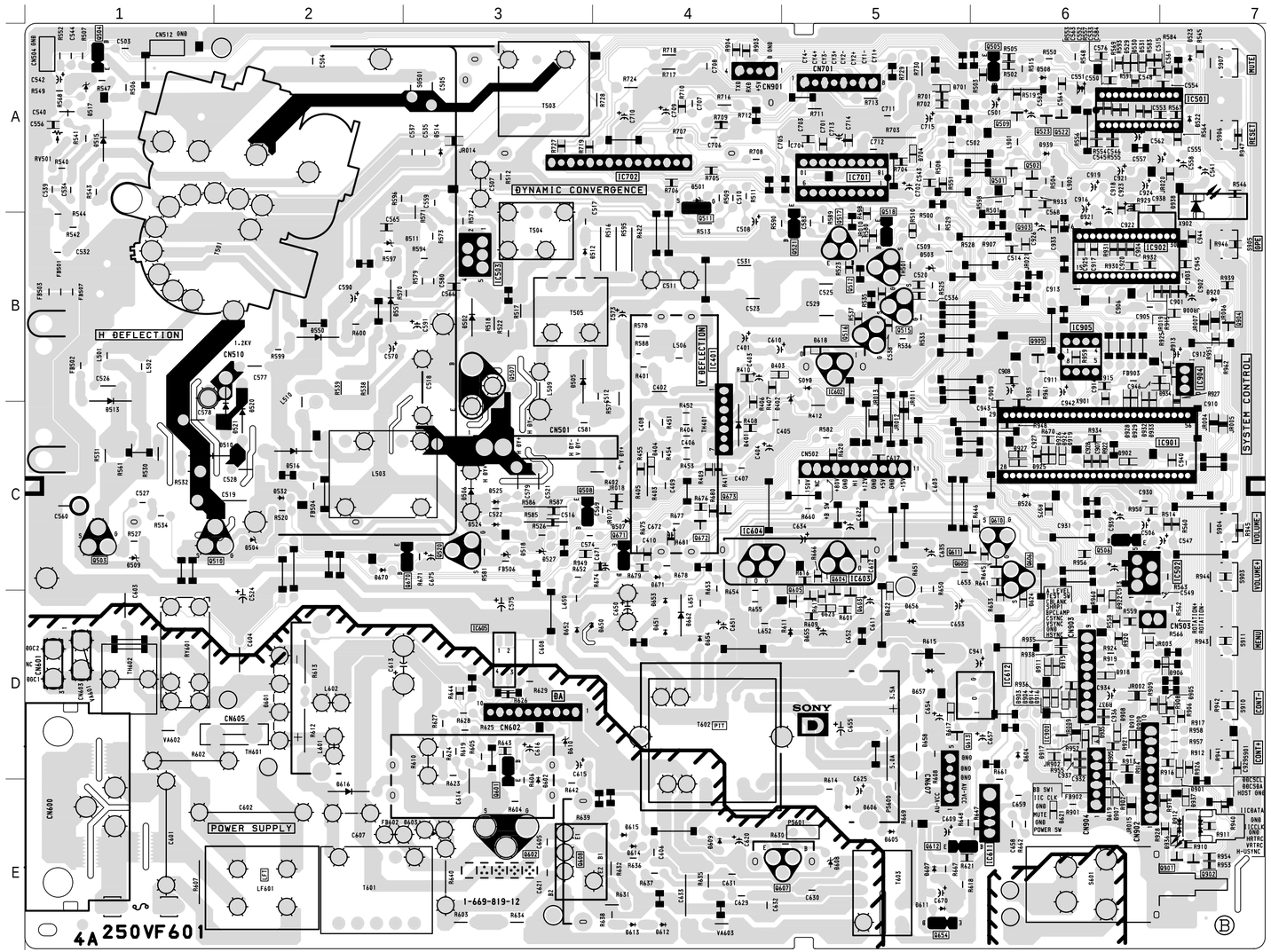
RV501	A-1

CRYSTAL

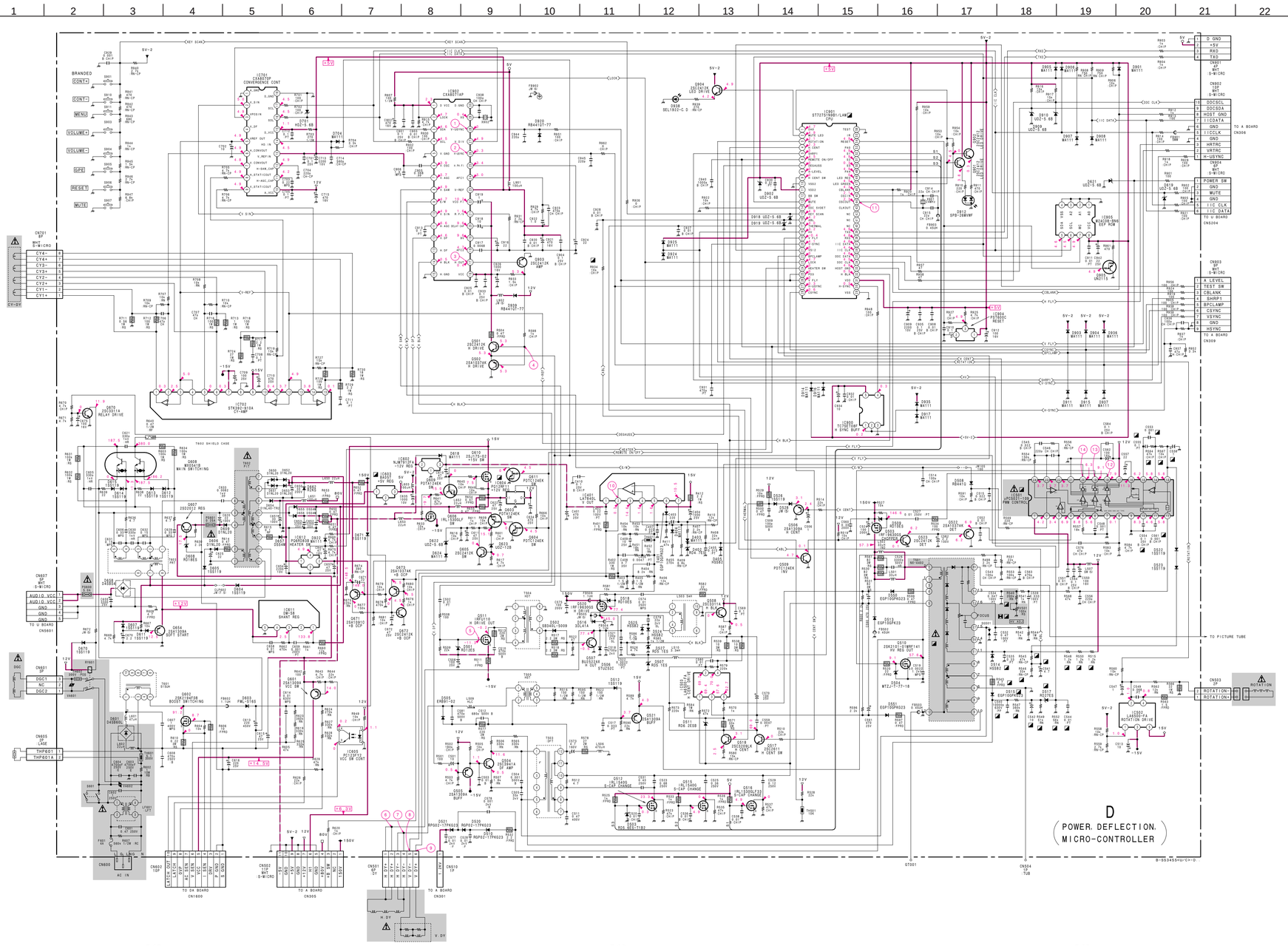
X901	B-6
X902	B-7

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

— D BOARD —



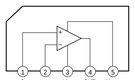
(2) Schematic Diagram of D Board

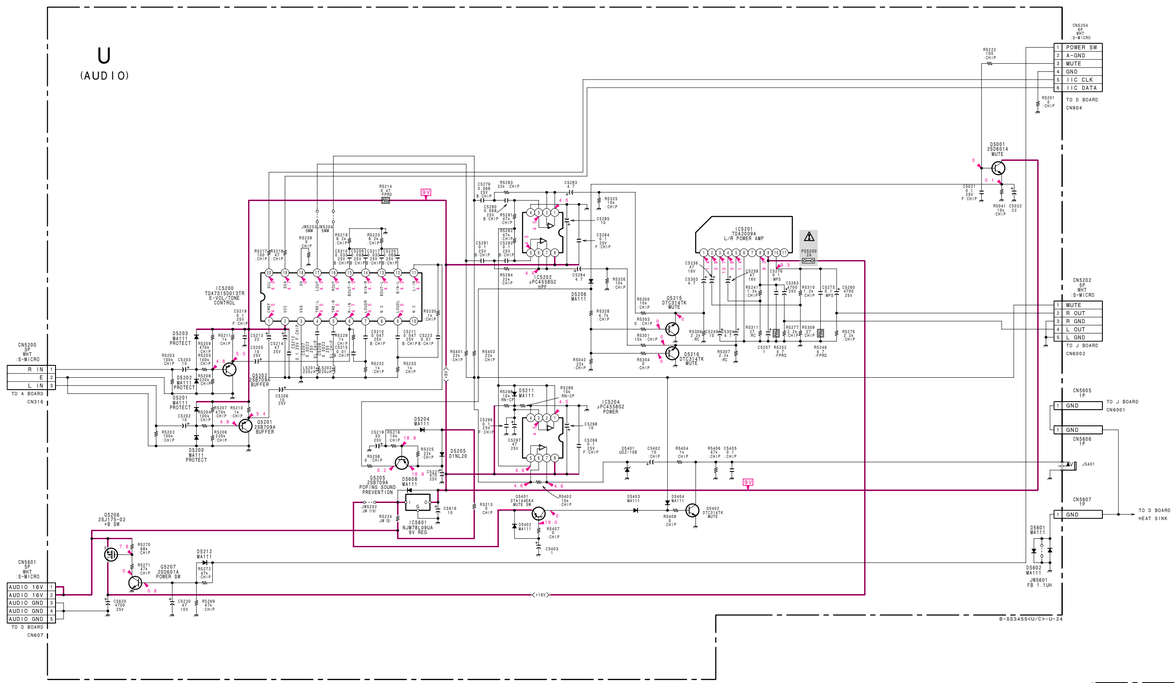


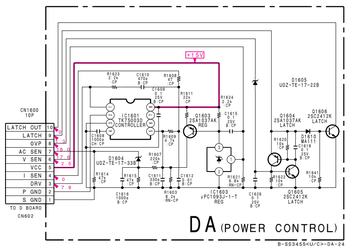
• D BOARD WAVEFORMS

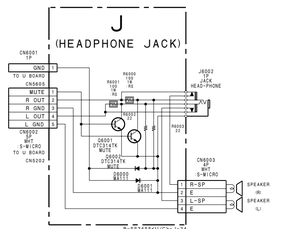
① 5.0 Vp-p (V)	② 5.0 Vp-p (H)
③ 0.7 Vp-p (H)	④ 11.0 Vp-p (H)
⑤ 9.0 Vp-p (H)	⑥ 1.2 kVp-p (H)
⑦ 80.0 Vp-p (H)	⑧ 1.2 Vp-p (V)
⑨ 52.0 Vp-p (V)	⑩ 52.0 Vp-p (V)
⑪ 0.5 Vp-p (24MHz)	⑫ 10.0 Vp-p (H)
⑬ 10.0 Vp-p (H)	⑭ 10.0 Vp-p (H)

• D BOARD
IC502, IC503
LA6500-FA

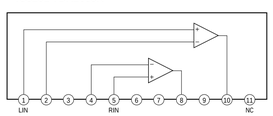




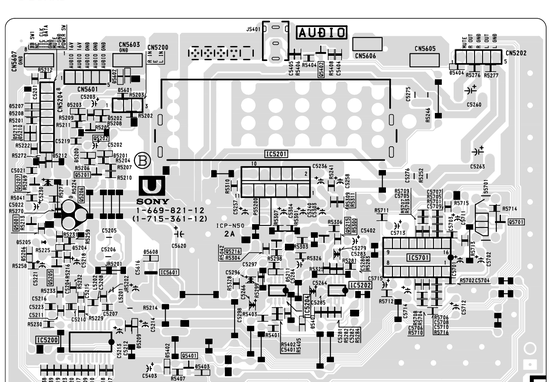




• U BOARD
IC5201 TDA2009A



— U BOARD —

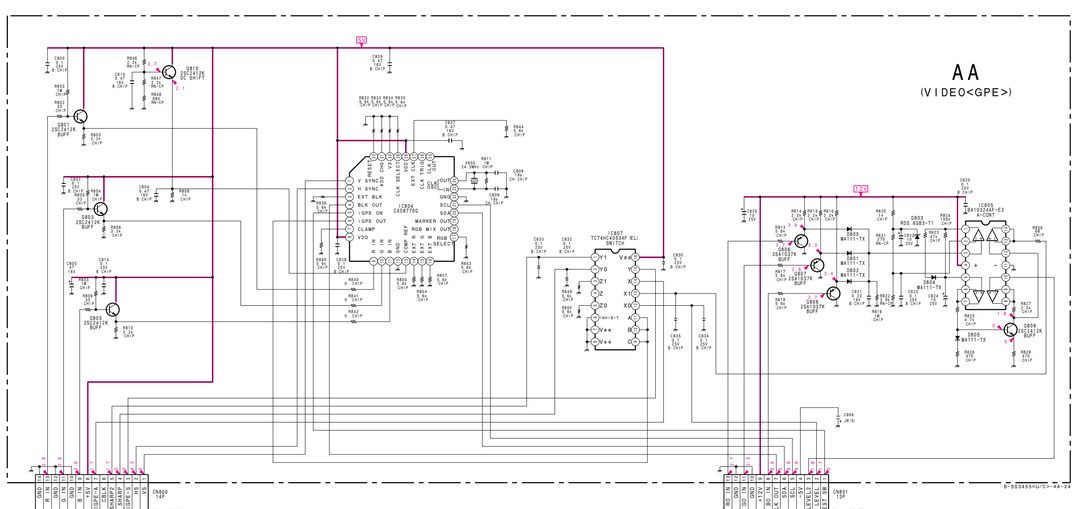


U [AUDIO]

U BOARD
Terminal name of semiconductors in silk screen printed circuit (✱)

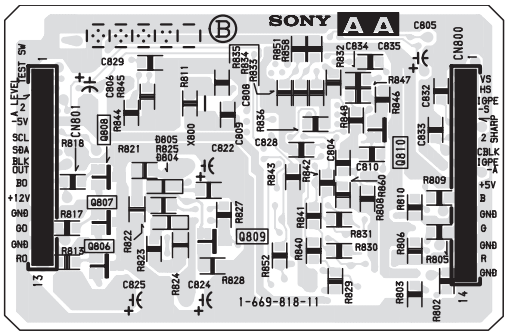
Ref.	✱
Q5001, Q5201, Q5202, Q5205, Q5207, Q5215, Q5216, Q5401, Q5402	①
D5200-D5204, D5206, D5211, D5212, D5401-D5404 D5601, D5602, D5608	③

✱: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

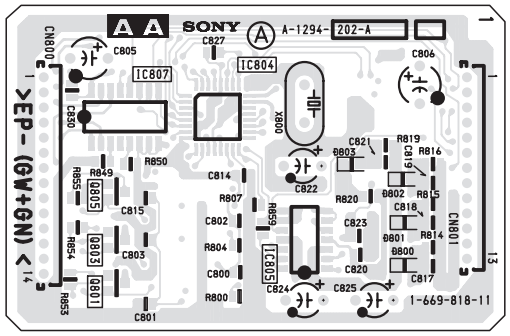


AA [VIDEO (GPE)] **DA** [POWER CONTROL] **J** [HEADPHONE JACK]

— AA BOARD (Conductor Side) —



— AA BOARD (Component Side) —



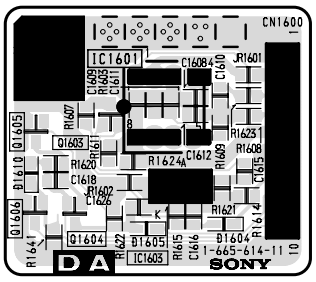
AA BOARD

Terminal name of semiconductors in silk screen printed circuit (*)

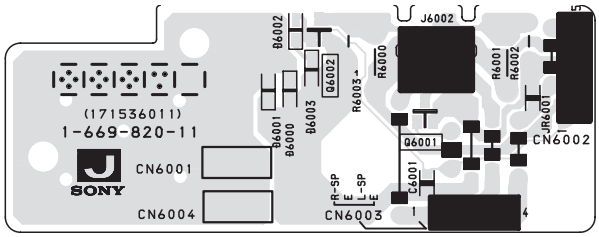
Ref.	*
Q801, Q803, Q805	②
Q806-Q810	①
D800-D805	③

***: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)**

— DA BOARD —



— J BOARD —



DA BOARD

Terminal name of semiconductors in silk screen printed circuit (*)

Ref.	*
Q1603-Q1606	①
D1604, D1605, D1610	③

***: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)**

J BOARD

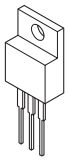
Terminal name of semiconductors in silk screen printed circuit (*)

Ref.	*
Q6001, Q6002	①
D6000, D6001	③

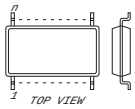
***: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)**

5-5. SEMICONDUCTORS

BA05T

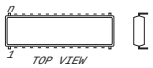


BA10324AF-E2
SN74HC02ANS
SN74HC02ANS-E20
XRA10324AF



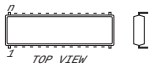
14 pin SOP

CXA8070P



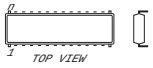
18 pin DIP

CXA8071AP



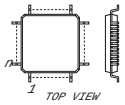
30 pin DIP

CXA8075S



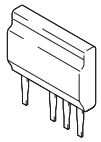
22 pin DIP

CXD8770Q

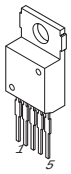


32 pin QFP

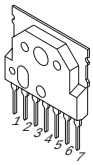
DM-58



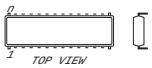
LA6500FA



LA7840L

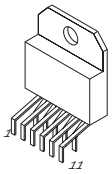


LSC4514P2

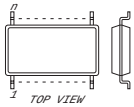


16 pin DIP

LM2405T-C

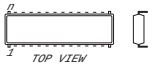


MC74HC4053F
TC74HC4053AF



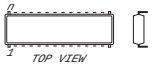
16 pin SOP

MM1382



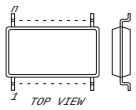
28 pin DIP

M24C08-BN6



8 pin DIP

M62392FP



24 pin SOP

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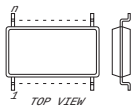
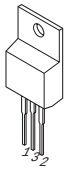
UPC4558G2



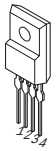
8 pin SOP

NJM78L09UA
TA78L09F-TE12L

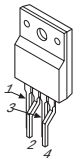
NJM7912FA



PQ12RF11



PQ6RD83B



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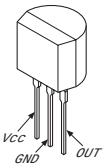

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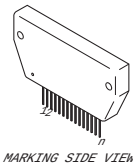

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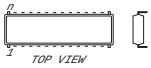
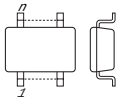


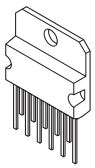
56 pin DIP

TC7SET08F



5 pin CHIP

TDA2009A



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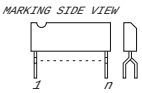
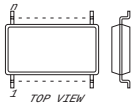


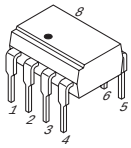
9 pin ZIP

TDA7315D013TR

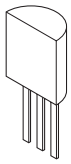


20 pin SOP

TK75003D



UPC1093J-1-T



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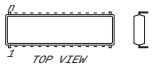
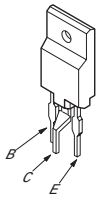


24 pin DIP

BU2522AX



DTA114TK
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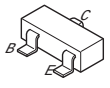
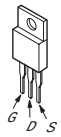
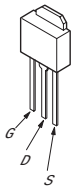
DTA144EKA-T146
DTC314TKH04
DTC314TK-T-146
PDTA124EK-115
PDTC124EK-115
UN2115-QRS
2SA1037AK-T146-QR
2SA1037AK-T146-R
2SA1037K-T-146-QR
2SA1162G
2SB709A-QRS-TX
2SC1623-L5L6
2SC2412K-T-146-Q
2SC2412K-T-146-QR
2SC3735-L-B35
2SC3735-T1B-B35
2SD601A-Q
2SD601A-QRS-TX



IRFI9630GS
IRFI9630GS-LF



IRFU110
IRFU110A



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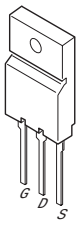

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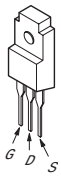

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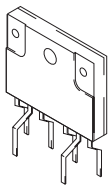

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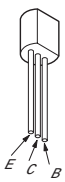
2SA1091O-TPE2
2SC3941A-Q



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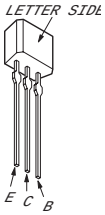
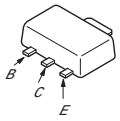
2SA1309A-QRSTA
2SC2785-HFE
2SC3311A-QRSTA



2SB798-DL
2SB798-DLDK



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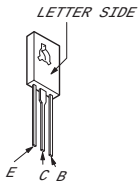
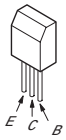


2SC3209LK



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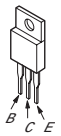
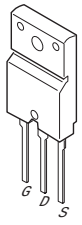


2SK2101-01MR-F141



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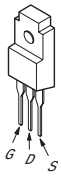
2SJ175-02



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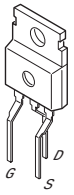
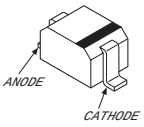


DTZ10B
DTZ33B
MA111
RD12SB2
RD5.6S-B
RD5.6SB3
UDZ-TE-17-10B
UDZ-TE-17-12B
UDZ-TE-17-22B
UDZ-TE-17-33B
UDZ-TE-17-5.6B
UDZ-TE-17-6.2B



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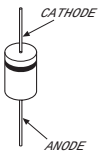
RGP02-17PKG23
3DL41A



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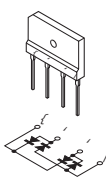
D4SBS4
D4SBS4-F
D4SB60L



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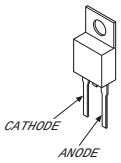
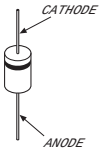


EGP10D
R2KS



EGP10GPKG23
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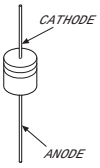
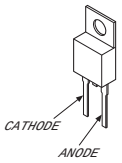
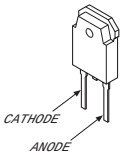
RB441Q
RB441QT-77
RD10ES-B2
RD12ES-B2
RD18ES-B2
RD27ES-B2
RD4.7ES-B2
RD5.1ES-B2
RD5.6ES-B2
RD6.2ES-B2
1SS119-25



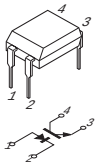
FML-S16S
FMG-G2CS



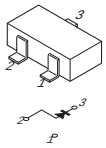
FMQ-G5FMS
5TUZ52C



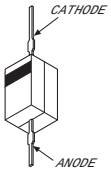
PC123F2
PC123FY2



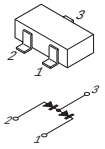
RD6.2M-BT



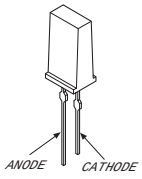
SB340L-5009



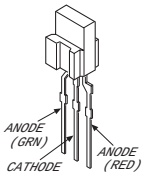
1SS226



SEL1922D-C
SEL1922D-C,D



SPB-26MVWF



SECTION 6
EXPLODED VIEWS

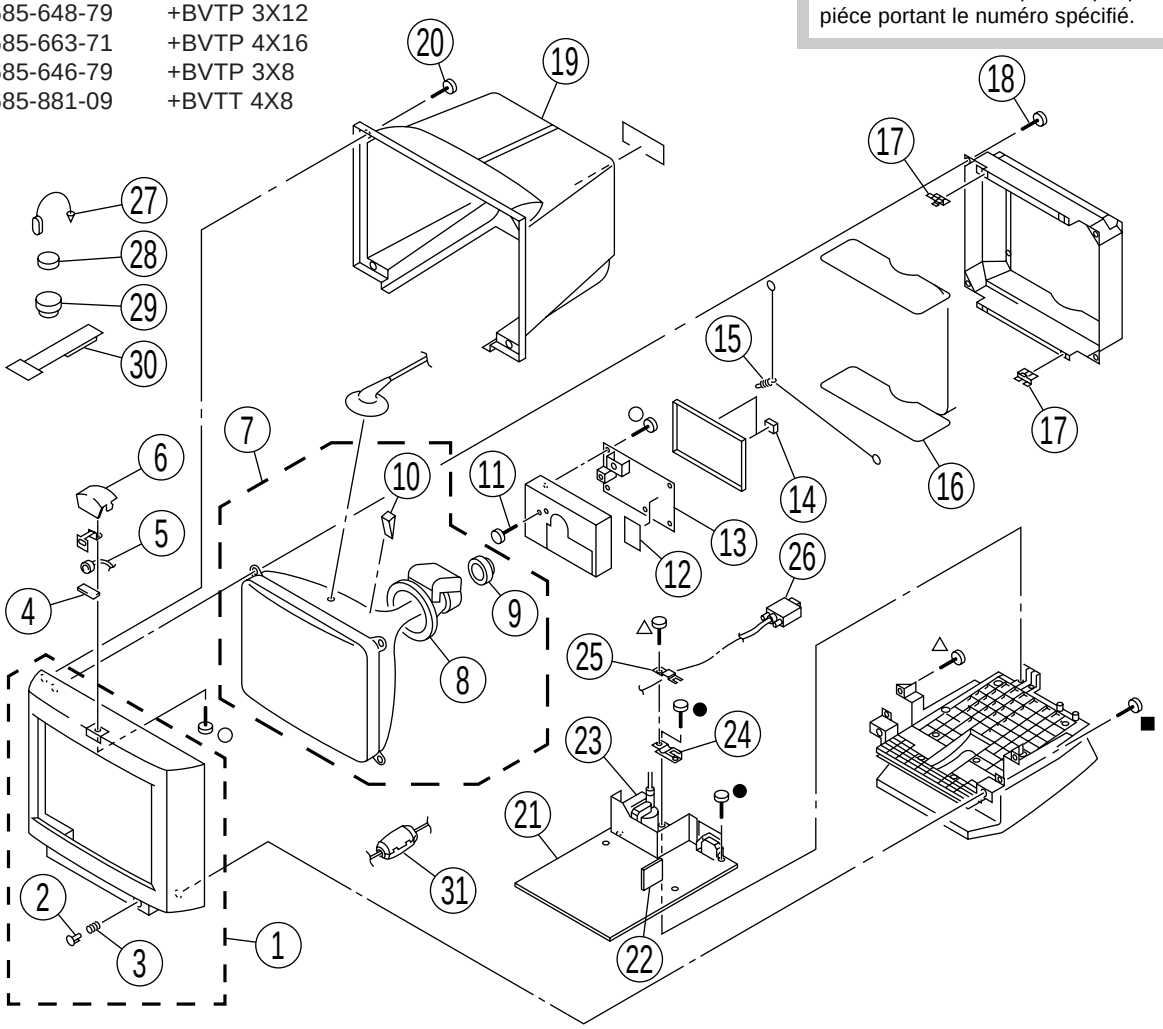
NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

6-1. CHASSIS

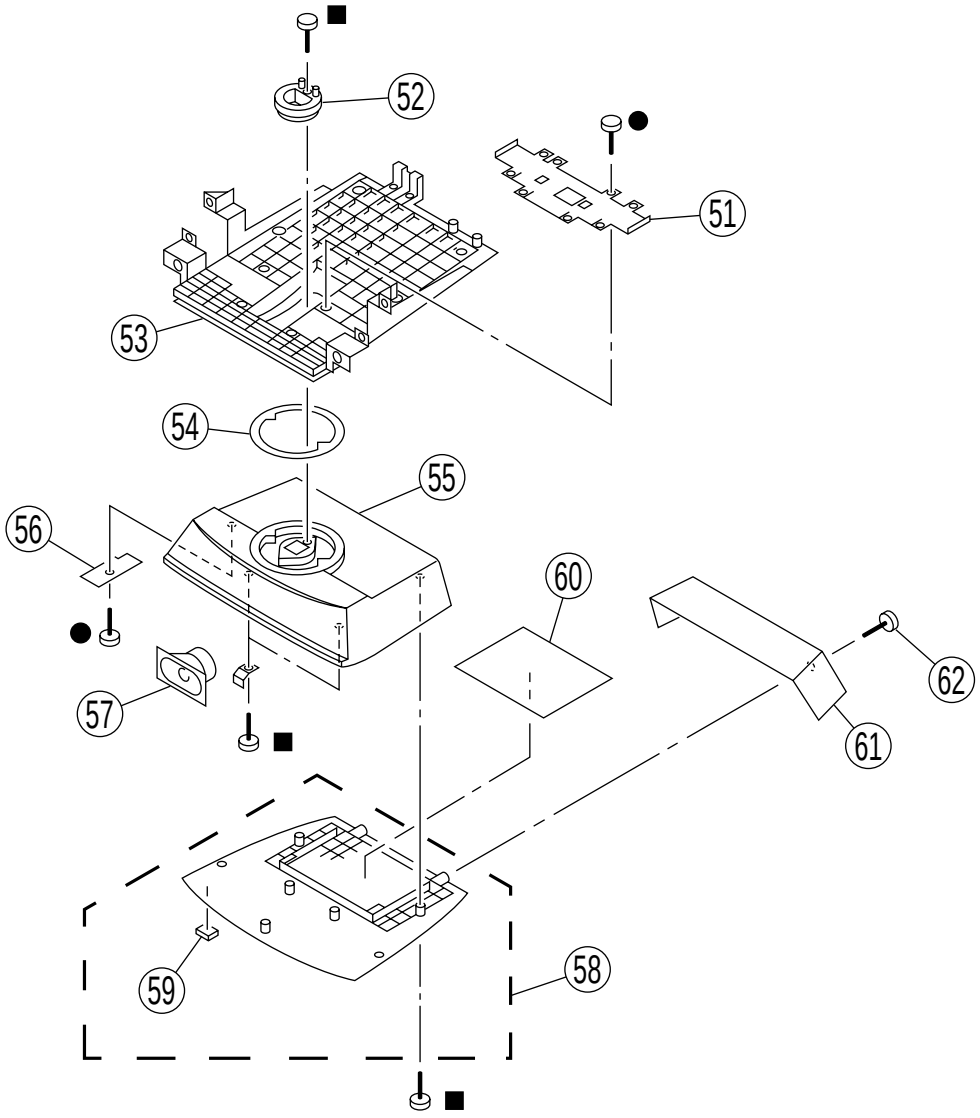
● 7-685-648-79 +BVTP 3X12
■ 7-685-663-71 +BVTP 4X16
○ 7-685-646-79 +BVTP 3X8
△ 7-685-881-09 +BVTT 4X8



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-980-1	BEZEL ASSY	2,3
2	4-066-423-01	BUTTON, POWER	
3	3-653-339-01	SPRING, COMPRESSION	
4	*4-058-939-01	CUSHION, MICROPHONE	
5	1-542-361-11	MICROPHONE ASSY	
6	4-058-386-01	CABINET, MICROPHONE	
7	⚠8-738-733-83	ITC ASSY (17FRFM-R3)	8-10
8	⚠8-451-490-11	DEFLECTION YOKE (Y17FRJ3-M)	
9	⚠1-452-912-11	NECK ASSY, PICTURE TUBE (NA-2914)	
10	4-050-492-01	SPACER, DY	
11	4-382-854-01	SCREW (M3X8), P, SW (+)	
12	*8-933-326-00	AA BOARD, COMPLETE	
13	*A-1294-314-A	A BOARD, COMPLETE	
14	*4-050-329-01	CUSHION (A)	
15	*4-047-316-01	SPRING, TENSION	
16	⚠1-416-282-11	COIL, DEMAGNETIC	
17	*4-056-260-01	SPACER, DEGAUSSER COIL	
18	4-365-808-01	SCREW (5), TAPPING	
19	4-066-420-01	CABINET	
20	4-052-070-11	SCREW +BVTP 4X16	
21	*A-1346-765-A	D BOARD, COMPLETE	22
22	*8-933-240-00	DA BOARD, COMPLETE	
23	⚠X-4036-234-1	TRANSFORMER ASSY, FLYBACK (NX-4402//J1K4)	
24	*4-045-130-01	BRACKET, CABLE	
25	*4-054-667-01	STOPPER, CABLE	
26	1-783-935-11	CABLE ASSY(15PD-SUB CONNECTOR)	
27	4-308-870-00	CLIP, LEAD WIRE	
28	1-452-032-00	MAGNET,DISC ; 10mmø	
29	1-452-094-00	MAGNET, ROTATABLE DISK ; 15mmø	
30	4-059-492-01	PERMALLOY (75), CONV.CORRECT	
31	1-500-386-11	FILTER, CLAMP (FERRITE CORE)	

6-2. STAND BLOCK

● 7-685-648-79 +BVTP 3X12
■ 7-685-663-71 +BVTP 4X16

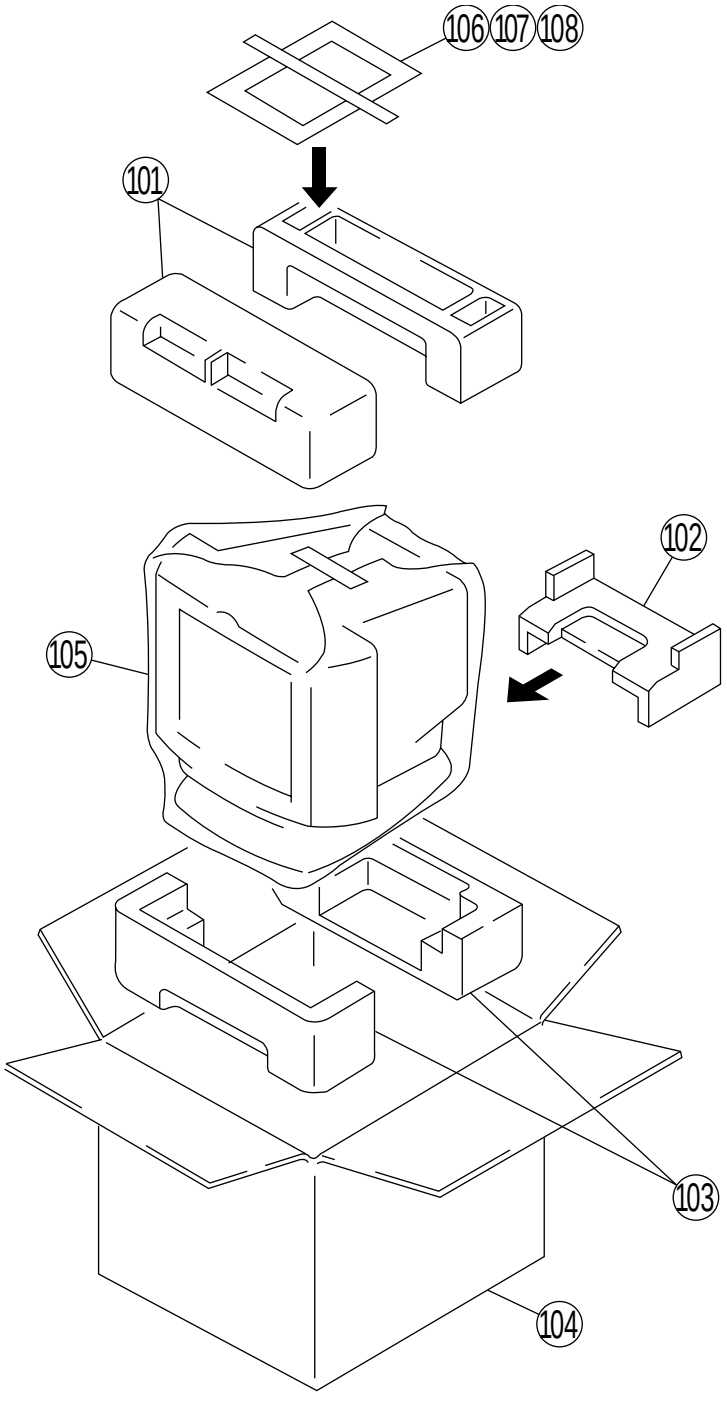


REF.NO.	PART NO.	DESCRIPTION	REMARK
51	*4-058-388-01	COVER, CABLE	
52	*4-058-385-01	STOPPER	
53	4-066-421-01	COVER, BOTTOM	
54	*4-041-625-01	RING, TILT SWIVEL	
55	X-4035-870-1	BASE (UPPER) ASSY, STAND	
56	*1-669-820-11	J BOARD	
57	1-529-123-11	SPEAKER (5X9CM)	
58	X-4035-821-1	BASE (LOWER) ASSY, STAND	59
59	*4-061-996-01	CUSHION	
60	*A-1373-698-A	U BOARD, COMPLETE	
61	4-065-203-02	BASE (REAR), STAND	
62	4-052-070-11	SCREW +BVTP 4X16	

6-3. PACKING MATERIALS

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.



REF.NO.	PART NO.	DESCRIPTION	REMARK
101	*4-065-435-01	CUSHION (UPPER) (ASSY)	
102	*4-065-441-01	PAD, TILT FIXED	
103	*4-065-436-01	CUSHION (LOWER) (ASSY)	
104	*4-065-434-01	INDIVIDUAL CARTON	
105	*4-041-927-31	BAG, POLYETHYLENE	
106	⚠1-534-827-14	CORD SET, POWER	
107	3-864-163-12	MANUAL, INSTRUCTION	
108	1-759-641-11	DISK, INFORMATION (V2.30) (Windows)	

SECTION 7
ELECTRICAL PARTS LIST

AA

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  MF : µF
- COILS
  UH : µH

REF.NO.	PART NO.	DESCRIPTION			REMARK
*	8-933-326-00	AA BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C800	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C802	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C804	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V	
C805	1-126-786-11	ELECT 47MF	20%	16V	
C808	1-163-099-00	CERAMIC CHIP 18PF	5%	50V	
C809	1-163-099-00	CERAMIC CHIP 18PF	5%	50V	
C810	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V	
C814	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C820	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C821	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	
C822	1-126-795-11	ELECT 10MF	20%	25V	
C823	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C824	1-126-795-11	ELECT 10MF	20%	25V	
C825	1-126-795-11	ELECT 10MF	20%	25V	
C827	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V	
C828	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C829	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V	
C830	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C832	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C833	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C834	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C835	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
		<CONNECTOR>			
CN800	1-569-515-11	PIN, CONNECTOR 14P			
CN801	1-785-254-11	PIN, CONNECTOR (PC BOARD) 13P			
		<DIODE>			
D800	8-719-404-49	DIODE MA111			
D801	8-719-404-49	DIODE MA111			
D802	8-719-404-49	DIODE MA111			
D803	8-719-158-18	ZENER DIODE RD5.6SB3			
D804	8-719-404-49	DIODE MA111			
D805	8-719-404-49	DIODE MA111			
		<IC>			
IC804	8-759-541-28	IC CXD8770Q			
IC805	8-759-058-50	IC XRA10324AF			
IC807	8-759-011-65	IC MC74HC4053F			
		<TRANSISTOR>			
Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q803	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q805	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q806	8-729-216-22	TRANSISTOR 2SA1162-G			
Q807	8-729-216-22	TRANSISTOR 2SA1162-G			
Q808	8-729-216-22	TRANSISTOR 2SA1162-G			
Q809	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q810	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R800	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R802	1-216-013-00	RES,CHIP	33	5% 1/10W	
R803	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R804	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R805	1-216-013-00	RES,CHIP	33	5% 1/10W	
R806	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R807	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R808	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R809	1-216-013-00	RES,CHIP	33	5% 1/10W	
R810	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R811	1-216-121-91	RES,CHIP	1M	5% 1/10W	
R813	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R814	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R815	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R816	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R817	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R818	1-216-067-00	RES,CHIP	5.6K	5% 1/10W	
R819	1-216-121-91	RES,CHIP	1M	5% 1/10W	
R820	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R821	1-216-637-11	METAL CHIP	270	0.50% 1/10W	
R822	1-216-665-11	METAL CHIP	3.9K	0.50% 1/10W	
R823	1-216-089-91	RES,CHIP	47K	5% 1/10W	
R824	1-216-097-91	RES,CHIP	100K	5% 1/10W	
R825	1-216-065-91	RES,CHIP	4.7K	5% 1/10W	

AA A

REF.NO.	PART NO.	DESCRIPTION			REMARK
R826	1-216-041-00	RES,CHIP	470	5%	1/10W
R827	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R828	1-216-041-00	RES,CHIP	470	5%	1/10W
R832	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R833	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R834	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R835	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R836	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R840	1-216-295-91	SHORT	0		
R841	1-216-295-91	SHORT	0		
R842	1-216-295-91	SHORT	0		
R843	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R844	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R846	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R847	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R848	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R849	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R850	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R853	1-216-121-91	RES,CHIP	1M	5%	1/10W
R854	1-216-121-91	RES,CHIP	1M	5%	1/10W
R855	1-216-121-91	RES,CHIP	1M	5%	1/10W
R859	1-216-021-00	RES,CHIP	68	5%	1/10W
R860	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		<CRYSTAL>			
X800	1-767-639-21	VIBRATOR, CRYSTAL			

****

* A-1294-314-A A BOARD, COMPLETE

****

4-382-854-01 SCREW (M3X8), P, SW (+) (IC002, IC004)

<CAPACITOR>

C001	1-162-318-11	CERAMIC	0.001MF	10%	500V
C002	1-137-150-11	MYLAR	0.01MF	10%	100V
C004	1-104-664-11	ELECT	47MF	20%	25V
C009	1-126-934-11	ELECT	220MF	20%	16V
C010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C011	1-106-220-00	MYLAR	0.1MF	10%	100V
C012	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C013	1-126-934-11	ELECT	220MF	20%	16V
C014	1-128-562-11	ELECT	47MF	20%	100V
C015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C016	1-104-664-11	ELECT	47MF	20%	25V
C017	1-104-664-11	ELECT	47MF	20%	25V
C018	1-107-652-11	ELECT	10MF	20%	200V
C019	1-104-664-11	ELECT	47MF	20%	25V
C022	1-104-664-11	ELECT	47MF	20%	25V
C027	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C028	1-104-664-11	ELECT	47MF	20%	25V
C029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C035	1-162-134-11	CERAMIC	470PF	10%	2KV
C036	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C037	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C038	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C041	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C042	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C043	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C044	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C045	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C046	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C047	1-104-664-11	ELECT	47MF	20%	25V
C048	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C049	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C050	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C051	1-104-664-11	ELECT	47MF	20%	25V
C053	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C054	1-137-528-11	FILM	0.1MF	10%	250V
C055	1-162-318-11	CERAMIC	0.001MF	10%	500V
C056	1-137-150-11	MYLAR	0.01MF	10%	100V
C059	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
C060	1-126-965-11	ELECT	22MF	20%	50V
C061	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C062	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C063	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C064	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C065	1-104-664-11	ELECT	47MF	20%	25V
C066	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C067	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C068	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C069	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C070	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C071	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C072	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C073	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C074	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C075	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C076	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C077	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C078	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C079	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C080	1-126-786-11	ELECT	47MF	20%	16V
C081	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C082	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C084	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C085	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C086	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C087	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C089	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C090	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C092	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C093	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C094	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C101	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C102	1-110-591-91	ELECT	4.7MF	20%	50V

A

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
C103	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
C105	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C106	1-137-528-11	FILM 0.1MF 10% 250V	
C201	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C202	1-110-591-91	ELECT 4.7MF 20% 50V	
C203	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
C204	1-216-295-91	SHORT 0	
C205	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C206	1-137-528-11	FILM 0.1MF 10% 250V	
C301	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C302	1-110-591-91	ELECT 4.7MF 20% 50V	
C303	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
C304	1-216-295-91	SHORT 0	
C305	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C306	1-137-528-11	FILM 0.1MF 10% 250V	
		<CONNECTOR>	
CN301*	1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P	
CN302	1-695-915-11	TAB (CONTACT)	
CN303	1-695-915-11	TAB (CONTACT)	
CN304	1-695-915-11	TAB (CONTACT)	
CN305*	1-564-526-11	PLUG, CONNECTOR 11P	
CN306*	1-564-525-11	PLUG, CONNECTOR 10P	
CN307*	1-564-512-11	PLUG, CONNECTOR 9P	
CN308	1-695-915-11	TAB (CONTACT)	
CN309	1-564-524-11	PLUG, CONNECTOR 9P	
CN310*	1-564-507-11	PLUG, CONNECTOR 4P	
CN312	1-785-221-12	PIN, CONNECTOR (PC BOARD) 13P	
CN313	1-785-222-12	PIN, CONNECTOR (PC BOARD) 14P	
CN314	1-564-517-11	PLUG, CONNECTOR 2P	
CN315*	1-564-508-11	PLUG, CONNECTOR 5P	
CN316*	1-564-518-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D001	8-719-109-89	ZENER DIODE RD5.6ESB2	
D003	8-719-109-89	ZENER DIODE RD5.6ESB2	
D005	8-719-911-19	DIODE 1SS119-25	
D006	8-719-911-19	DIODE 1SS119-25	
D007	8-719-109-89	ZENER DIODE RD5.6ESB2	
D008	8-719-109-89	ZENER DIODE RD5.6ESB2	
D009	8-719-404-49	DIODE MA111	
D013	8-719-404-49	DIODE MA111	
D014	8-719-911-19	DIODE 1SS119-25	
D015	8-719-105-99	ZENER DIODE RD6.2M-B1	
D101	8-719-800-76	DIODE 1SS226	
D104	8-719-970-83	DIODE HSS82	
D105	8-719-970-83	DIODE HSS82	
D106	8-719-970-83	DIODE HSS82	
D201	8-719-800-76	DIODE 1SS226	
D204	8-719-970-83	DIODE HSS82	
D205	8-719-970-83	DIODE HSS82	
D206	8-719-970-83	DIODE HSS82	
D301	8-719-800-76	DIODE 1SS226	
D304	8-719-970-83	DIODE HSS82	
D305	8-719-970-83	DIODE HSS82	
D306	8-719-970-83	DIODE HSS82	
		<FERRITE BEAD>	
FB001	1-412-911-11	FERRITE 1.1UH	
FB005	1-412-911-11	FERRITE 1.1UH	
FB007	1-412-911-11	FERRITE 1.1UH	
FB011	1-412-911-11	FERRITE 1.1UH	
FB012	1-216-295-91	SHORT 0	
FB013	1-216-295-91	SHORT 0	
FB014	1-216-295-91	SHORT 0	
FB015	1-543-961-11	FERRITE	
FB016	1-216-295-91	SHORT 0	
FB101	1-500-419-21	FERRITE	
FB102	1-500-419-21	FERRITE	
FB110	1-412-911-11	FERRITE 1.1UH	
FB201	1-500-419-21	FERRITE	
FB202	1-500-419-21	FERRITE	
FB210	1-412-911-11	FERRITE 1.1UH	
FB301	1-500-419-21	FERRITE	
FB302	1-500-419-21	FERRITE	
FB310	1-412-911-11	FERRITE 1.1UH	
		<FILTER>	
FL001	1-412-911-31	FERRITE	
FL101	1-412-911-31	FERRITE	
FL201	1-412-911-31	FERRITE	
FL301	1-412-911-31	FERRITE	
		<TERMINAL>	
GT101*	1-537-738-21	TERMINAL, EARTH	
GT102*	1-537-738-21	TERMINAL, EARTH	
GT103*	1-537-738-21	TERMINAL, EARTH	
GT104*	1-537-738-21	TERMINAL, EARTH	
		<IC>	
IC001	8-759-474-78	IC MM1382	
IC002	8-759-559-99	IC LM2405T-C	
IC003	8-759-541-26	IC LSC4514P2	
IC004	8-759-434-40	IC TDA6103Q/N3,112	
IC005	8-759-100-96	IC uPC4558G2	
IC006	8-759-543-53	IC CXA8075S	
IC008	8-759-542-46	IC M62392FP	
IC009	8-759-925-72	IC SN74HC02ANS	
		<JACK>	
J001 ⚠	1-251-598-11	SOCKET, PICTURE TUBE	
		<COIL>	
L002	1-410-682-31	INDUCTOR 470UH	

A

REF.NO.	PART NO.	DESCRIPTION			REMARK
L003	1-412-529-11	INDUCTOR 22UH			
L006	1-412-537-31	INDUCTOR 100UH			
L101	1-414-140-11	INDUCTOR 0.68UH			
L201	1-414-140-11	INDUCTOR 0.68UH			
L301	1-414-140-11	INDUCTOR 0.68UH			
		<TRANSISTOR>			
Q001	8-729-032-61	TRANSISTOR 2SC5022-02			
Q004	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q005	8-729-101-07	TRANSISTOR 2SB798-DL			
Q006	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q007	8-729-140-47	TRANSISTOR 2SC3735-L-B35			
Q008	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q009	8-729-027-31	TRANSISTOR DTA124EKA-T146			
Q010	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q011	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R002	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R003	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R004	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R005	1-216-113-00	RES,CHIP	470K	5%	1/10W
R006	1-216-025-91	RES,CHIP	100	5%	1/10W
R007	1-216-049-91	RES,CHIP	1K	5%	1/10W
R014	1-216-073-00	RES,CHIP	10K	5%	1/10W
R016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R017	1-216-025-91	RES,CHIP	100	5%	1/10W
R018	1-216-025-91	RES,CHIP	100	5%	1/10W
R020	1-216-295-91	SHORT	0		
R021	1-216-295-91	SHORT	0		
R022	1-216-025-91	RES,CHIP	100	5%	1/10W
R023	1-216-025-91	RES,CHIP	100	5%	1/10W
R026	1-216-073-00	RES,CHIP	10K	5%	1/10W
R027	1-216-073-00	RES,CHIP	10K	5%	1/10W
R028	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R029	1-216-095-00	RES,CHIP	82K	5%	1/10W
R030	1-216-295-91	SHORT	0		
R031	1-216-049-91	RES,CHIP	1K	5%	1/10W
R032	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R033	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R034	1-216-025-91	RES,CHIP	100	5%	1/10W
R035	1-216-025-91	RES,CHIP	100	5%	1/10W
R036	1-249-405-11	CARBON	100	5%	1/4W F
R037	1-216-295-91	SHORT	0		
R040	1-216-113-00	RES,CHIP	470K	5%	1/10W
R041	1-163-085-00	CERAMIC CHIP	2PF	0.25PF	50V
R043	1-216-295-91	SHORT	0		
R045	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R046	1-216-097-91	RES,CHIP	100K	5%	1/10W
R047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R048	1-211-885-21	METAL	2.2M	5%	1W
R049	1-216-101-00	RES,CHIP	150K	5%	1/10W
R051	1-216-049-91	RES,CHIP	1K	5%	1/10W
R052	1-216-073-00	RES,CHIP	10K	5%	1/10W
R053	1-219-621-91	METAL	22M	10%	1/4W
R055	1-216-025-91	RES,CHIP	100	5%	1/10W
R056	1-216-025-91	RES,CHIP	100	5%	1/10W
R057	1-216-049-91	RES,CHIP	1K	5%	1/10W
R058	1-216-049-91	RES,CHIP	1K	5%	1/10W
R059	1-216-049-91	RES,CHIP	1K	5%	1/10W
R060	1-216-073-00	RES,CHIP	10K	5%	1/10W
R061	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R062	1-216-041-00	RES,CHIP	470	5%	1/10W
R063	1-216-037-00	RES,CHIP	330	5%	1/10W
R064	1-202-830-00	SOLID	10K	20%	1/2W
R065	1-216-049-91	RES,CHIP	1K	5%	1/10W
R067	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R068	1-216-073-00	RES,CHIP	10K	5%	1/10W
R069	1-216-077-00	RES,CHIP	15K	5%	1/10W
R070	1-216-077-00	RES,CHIP	15K	5%	1/10W
R071	1-216-081-00	RES,CHIP	22K	5%	1/10W
R072	1-216-105-91	RES,CHIP	220K	5%	1/10W
R073	1-216-105-91	RES,CHIP	220K	5%	1/10W
R074	1-216-083-00	RES,CHIP	27K	5%	1/10W
R075	1-216-073-00	RES,CHIP	10K	5%	1/10W
R081	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R101	1-215-394-00	METAL	75	1%	1/4W
R103	1-216-295-91	SHORT	0		
R104	1-216-021-00	RES,CHIP	68	5%	1/10W
R106	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R107	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R108	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-215-477-00	METAL	220K	1%	1/4W
R111	1-249-401-11	CARBON	47	5%	1/4W F
R112	1-216-013-00	RES,CHIP	33	5%	1/10W
R115	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R116	1-216-081-00	RES,CHIP	22K	5%	1/10W
R133	1-249-407-11	CARBON	150	5%	1/4W
R151	1-202-549-00	SOLID	100	20%	1/2W
R201	1-215-394-00	METAL	75	1%	1/4W
R203	1-216-295-91	SHORT	0		
R204	1-216-021-00	RES,CHIP	68	5%	1/10W
R206	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R207	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R208	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R209	1-216-121-91	RES,CHIP	1M	5%	1/10W
R210	1-215-477-00	METAL	220K	1%	1/4W
R211	1-249-401-11	CARBON	47	5%	1/4W F
R212	1-216-013-00	RES,CHIP	33	5%	1/10W
R215	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R216	1-216-081-00	RES,CHIP	22K	5%	1/10W
R233	1-247-815-91	CARBON	220	5%	1/4W
R251	1-202-549-00	SOLID	100	20%	1/2W
R301	1-215-394-00	METAL	75	1%	1/4W
R303	1-216-295-91	SHORT	0		
R304	1-216-021-00	RES,CHIP	68	5%	1/10W
R306	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R308	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R309	1-216-121-91	RES,CHIP	1M	5%	1/10W
R310	1-215-477-00	METAL	220K	1%	1/4W
R311	1-249-401-11	CARBON	47	5%	1/4W F
R312	1-216-013-00	RES,CHIP	33	5%	1/10W
R313	1-216-025-91	RES,CHIP	100	5%	1/10W
R314	1-249-417-11	CARBON	1K	5%	1/4W F
R315	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R316	1-216-081-00	RES,CHIP	22K	5%	1/10W
R333	1-249-407-11	CARBON	150	5%	1/4W
R351	1-202-549-00	SOLID	100	20%	1/2W
		<SPARK GAP>			
SG001	1-519-422-11	GAP, SPARK			
SG002	1-519-422-11	GAP, SPARK			
SG101	1-517-499-21	GAP, SPARK			
SG201	1-517-499-21	GAP, SPARK			
SG301	1-517-499-21	GAP, SPARK			

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* A-1346-765-A D BOARD, COMPLETE
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2-371-561-00 BUSHING (P), INSULATING (IC503)
4-045-133-01 HOLDER (B), LED (D938)
* 4-049-002-01 HOLDER, LED (D912)
4-061-191-01 SHEET, INSULATE (IC503)
4-061-192-01 SHEET, INSULATE (Q602)

4-382-854-01 SCREW (M3X8), P, SW (+) (Q607)
4-382-854-11 SCREW (M3X10), P, SW (+) (IC401, IC503, IC602, IC603, IC604, Q503, Q507, Q510, Q602, Q608, D506, D601, D603, D658)
4-382-854-21 SCREW (M3X14), P, SW (+) (IC702)
4-389-025-01 SCREW (M4) (EXT TOOTH WASHER)

<CAPACITOR>

C401	1-128-528-11	ELECT	470MF	20%	25V
C402	1-106-228-00	MYLAR	0.22MF	10%	100V
C403	1-126-969-11	ELECT	220MF	20%	50V
C404	1-126-942-61	ELECT	1000MF	20%	25V
C405	1-137-371-11	FILM	0.015MF	5%	50V
C406	1-137-368-11	FILM	0.0047MF	5%	50V
C407	1-137-372-11	FILM	0.022MF	5%	50V
C408	1-107-713-11	ELECT	4.7MF	20%	35V
C409	1-124-006-11	ELECT	10MF	20%	25V
C410	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C501	1-126-964-11	ELECT	10MF	20%	50V
C502	1-137-370-11	FILM	0.01MF	5%	50V
C503	1-102-129-00	CERAMIC	0.01MF	10%	50V
C504	1-162-318-11	CERAMIC	0.001MF	10%	500V
C505	1-109-843-11	CERAMIC	33PF	5%	2KV
C506	1-126-960-11	ELECT	1MF	20%	50V
C508	1-104-665-11	ELECT	100MF	20%	25V
C509	1-162-117-00	CERAMIC	100PF	10%	500V
C510	1-102-228-00	CERAMIC	470PF	10%	500V
C511	1-115-343-11	FILM	0.47MF	5%	400V
C512	1-102-002-00	CERAMIC	680PF	10%	500V
C513	1-126-964-11	ELECT	10MF	20%	50V
C514	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C515	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C517	1-130-489-00	FILM	0.033MF	5%	50V
C518	1-117-832-11	FILM	4700PF	3%	2KV
C519	1-136-064-00	FILM	2200PF	3%	1.2KV
C520	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C521	1-107-444-11	CERAMIC	100PF	5%	2KV
C522	1-136-481-11	MYLAR	0.0022MF	10%	100V
C523	1-115-520-11	FILM	0.68MF	5%	250V
C524	1-107-955-11	ELECT	100MF	20%	200V
C525	1-117-206-21	FILM	0.36MF	5%	250V
C526	1-165-136-11	CERAMIC	3300PF	10%	500V
C527	1-117-879-91	CAPACITOR	0.01MF	10%	250V
C528	1-115-349-51	CERAMIC	0.01MF		2KV
C529	1-115-511-11	FILM	0.12MF	5%	250V
C531	1-117-451-11	FILM	0.43MF	5%	250V
C532	1-137-426-11	FILM	0.47MF	10%	100V
C534	1-137-420-11	FILM	0.047MF	10%	100V
C535	1-130-489-00	FILM	0.033MF	5%	50V
C536	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C538	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C539	1-137-419-11	FILM	0.033MF	10%	100V
C540	1-136-203-11	FILM	10000PF	5%	630V
C541	1-126-963-11	ELECT	4.7MF	20%	50V
C542	1-126-964-11	ELECT	10MF	20%	50V
C543	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C544	1-137-370-11	FILM	0.01MF	5%	50V
C545	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C546	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C547	1-126-960-11	ELECT	1MF	20%	50V
C548	1-137-364-11	FILM	0.001MF	5%	50V
C549	1-137-375-11	FILM	0.068MF	5%	50V
C550	1-126-933-11	ELECT	100MF	20%	16V
C551	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C552	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C553	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C554	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C555	1-130-495-00	FILM	0.1MF	5%	50V
C556	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C557	1-126-965-11	ELECT	22MF	20%	50V
C558	1-126-960-11	ELECT	1MF	20%	50V
C559	1-137-368-11	FILM	0.0047MF	5%	50V
C560	1-117-665-11	FILM	0.33MF	5%	200V
C561	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C562	1-126-933-11	ELECT	100MF	20%	16V
C563	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C564	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C569	1-130-495-00	FILM	0.1MF	5%	50V
C570	1-104-665-11	ELECT	100MF	20%	25V
C573	1-107-635-11	ELECT	4.7MF	20%	160V
C574	1-117-879-91	CAPACITOR	0.01MF	10%	250V
C575	1-107-955-11	ELECT	100MF	20%	200V

D

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C576	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C577	1-115-349-51	CERAMIC	0.01MF		2KV
C578	1-117-214-11	CERAMIC	0.001MF	10%	2KV
C579	1-109-879-11	CERAMIC	22PF	5%	2KV
C580	1-137-370-11	FILM	0.01MF	5%	50V
C581	1-102-228-00	CERAMIC	470PF	10%	500V
C582	1-128-579-11	ELECT	2.2MF	20%	100V
C584	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C590	1-126-941-11	ELECT	470MF	20%	25V
C591	1-126-941-11	ELECT	470MF	20%	25V
C601 ⚠	1-104-708-51	FILM	0.47MF	20%	250V
C602 ⚠	1-107-533-51	FILM	1MF	20%	250V
C603 ⚠	1-113-912-51	CERAMIC	0.0047MF	20%	250V
C604 ⚠	1-113-912-51	CERAMIC	0.0047MF	20%	250V
C605	1-162-115-00	CERAMIC	330PF	10%	1KV
C606	1-136-171-00	FILM	0.33MF	5%	50V
C607	1-137-479-11	FILM	1MF	10%	400V
C608	1-113-900-11	CERAMIC	470PF	10%	250V
C610	1-104-664-11	ELECT	47MF	20%	25V
C611	1-104-664-11	ELECT	47MF	20%	25V
C613	1-113-707-11	ELECT (BLOCK)	220MF	20%	450V
C614	1-136-203-11	FILM	0.01MF	10%	630V
C615	1-107-888-11	ELECT	47MF	20%	25V
C616	1-104-666-11	ELECT	220MF	20%	25V
C620	1-128-560-11	ELECT	22MF	20%	100V
C621	1-162-115-00	CERAMIC	330PF	10%	1KV
C622	1-104-664-11	ELECT	47MF	20%	25V
C625	1-126-965-11	ELECT	22MF	20%	50V
C629	1-136-171-00	FILM	0.33MF	5%	50V
C630	1-162-115-00	CERAMIC	330PF	10%	1KV
C631	1-136-167-00	FILM	0.15MF	5%	50V
C632	1-136-167-00	FILM	0.15MF	5%	50V
C633	1-110-488-11	FILM	0.0082MF	2.50%	1KV
C634	1-128-528-11	ELECT	470MF	20%	25V
C635	1-126-926-11	ELECT	1000MF	20%	10V
C650	1-110-641-51	ELECT	33MF	20%	200V
C651	1-128-561-91	ELECT	33MF	20%	100V
C652	1-107-890-11	ELECT	2200MF	20%	25V
C653	1-107-890-11	ELECT	2200MF	20%	25V
C654	1-126-927-11	ELECT	2200MF	20%	10V
C655	1-107-891-11	ELECT	3300MF	20%	25V
C657	1-104-664-11	ELECT	47MF	20%	25V
C658	1-136-153-00	FILM	0.01MF	5%	50V
C659	1-104-987-11	FILM	0.001MF	10%	200V
C670	1-126-961-11	ELECT	2.2MF	20%	50V
C671	1-126-965-11	ELECT	22MF	20%	50V
C672	1-104-664-11	ELECT	47MF	20%	25V
C675	1-126-933-11	ELECT	100MF	20%	16V
C701	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C702	1-126-964-11	ELECT	10MF	20%	50V
C703	1-136-169-00	FILM	0.22MF	5%	50V
C704	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C705	1-130-495-00	FILM	0.1MF	5%	50V
C706	1-102-852-91	CERAMIC	47PF	5%	50V
C707	1-102-852-91	CERAMIC	47PF	5%	50V
C708	1-130-495-00	FILM	0.1MF	5%	50V
C709	1-126-942-61	ELECT	1000MF	20%	25V
C710	1-126-941-11	ELECT	470MF	20%	25V
C711	1-130-495-00	FILM	0.1MF	5%	50V
C712	1-130-495-00	FILM	0.1MF	5%	50V
C713	1-126-927-11	ELECT	2200MF	20%	10V
C714	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C715	1-126-935-11	ELECT	470MF	20%	16V
C901	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C902	1-126-935-11	ELECT	470MF	20%	16V
C903	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C904	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C905	1-136-500-11	FILM	0.068MF	5%	50V
C906	1-136-177-00	FILM	1MF	5%	50V
C908	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C909	1-126-927-11	ELECT	2200MF	20%	10V
C910	1-130-495-00	FILM	0.1MF	5%	50V
C911	1-137-370-11	FILM	0.01MF	5%	50V
C912	1-126-933-11	ELECT	100MF	20%	16V
C913	1-130-495-00	FILM	0.1MF	5%	50V
C914	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C915	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C916	1-126-965-11	ELECT	22MF	20%	50V
C917	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C918	1-126-964-11	ELECT	10MF	20%	50V
C919	1-126-960-11	ELECT	1MF	20%	50V
C920	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C921	1-126-935-11	ELECT	470MF	20%	16V
C922	1-126-960-11	ELECT	1MF	20%	50V
C923	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C924	1-126-965-11	ELECT	22MF	20%	50V
C925	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C926	1-126-767-11	ELECT	1000MF	20%	16V
C927	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C928	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C929	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C930	1-137-370-11	FILM	0.01MF	5%	50V
C931	1-136-356-11	FILM	470PF	5%	50V
C932	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C933	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C934	1-126-964-11	ELECT	10MF	20%	50V
C935	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C936	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C937	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C938	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C940	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C941	1-104-664-11	ELECT	47MF	20%	16V
C942	1-128-551-11	ELECT	22MF	20%	25V
C944	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C945	1-163-001-11	CERAMIC CHIP	220PF	10%	50V

<CONNECTOR>

CN501*	1-580-798-11	CONNECTOR PIN (DY)	
CN502*	1-564-514-11	PLUG, CONNECTOR 11P	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
CN504	1-695-915-11	TAB (CONTACT)	
CN600⚠	1-251-644-11	INLET, AC 3P (WITH NOISE FILTER)	
CN601	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN602*	1-774-511-11	CONNECTOR, BOARD TO BOARD 10P	
CN605*	1-506-371-00	PIN, CONNECTOR 2P	
CN607*	1-564-508-11	PLUG, CONNECTOR 5P	
CN701*	1-564-511-11	PLUG, CONNECTOR 8P	
CN901*	1-508-879-11	BASE POST	
CN902	1-564-513-11	PLUG, CONNECTOR 10P	
CN903*	1-564-512-11	PLUG, CONNECTOR 9P	
CN904*	1-564-509-11	PLUG, CONNECTOR 6P	
		<DIODE>	
D401	8-719-979-58	DIODE EGP10D	
D402	8-719-109-81	ZENER DIODE RD4.7ESB2	
D403	8-719-404-49	DIODE MA111	
D404	8-719-404-49	DIODE MA111	
D405	8-719-970-83	DIODE HSS82	
D501	8-719-110-31	ZENER DIODE RD12ESB2	
D502	8-719-047-65	DIODE SB340L-5009	
D503	8-719-109-89	ZENER DIODE RD5.6ESB2	
D504	8-719-110-49	ZENER DIODE RD18ESB2	
D505	8-719-941-74	DIODE ERB91-02	
D506	8-719-061-21	DIODE FMQ-G5FMS	
D507	8-719-109-85	ZENER DIODE RD5.1ESB2	
D508	8-719-986-73	DIODE RB441Q	
D509	8-719-110-17	ZENER DIODE RD10ESB2	
D510	8-719-028-72	DIODE RGP02-17EL-6433	
D511	8-719-109-93	ZENER DIODE RD6.2ESB2	
D512	8-719-911-19	DIODE 1SS119-25	
D513	8-719-979-58	DIODE EGP10D	
D514	8-719-970-83	DIODE HSS82	
D515	8-719-979-58	DIODE EGP10D	
D516	8-719-051-97	DIODE 3DL41A(LC6-15)	
D517	8-719-110-67	ZENER DIODE RD27ESB2	
D518	8-719-110-17	ZENER DIODE RD10ESB2	
D520	8-719-028-72	DIODE RGP02-17EL-6433	
D521	8-719-028-72	DIODE RGP02-17EL-6433	
D522	8-719-911-19	DIODE 1SS119-25	
D523	8-719-911-19	DIODE 1SS119-25	
D524	8-719-970-83	DIODE HSS82	
D525	8-719-970-83	DIODE HSS82	
D526	8-719-911-19	DIODE 1SS119-25	
D527	8-719-109-85	ZENER DIODE RD5.1ESB2	
D550	8-719-979-58	DIODE EGP10D	
D551	8-719-979-58	DIODE EGP10D	
D601 ⚠	8-719-510-53	DIODE D4SB60L	
D603	8-719-051-96	DIODE FMG-G2CS	
D604	8-719-911-19	DIODE 1SS119-25	
D605	8-719-911-19	DIODE 1SS119-25	
D606	8-719-510-46	DIODE D1NL20	
D607	8-719-911-19	DIODE 1SS119-25	
D608	8-719-110-49	ZENER DIODE RD18ESB2	
D609	8-719-510-46	DIODE D1NL20	
D611	8-719-911-19	DIODE 1SS119-25	
D612	8-719-911-19	DIODE 1SS119-25	
D613	8-719-911-19	DIODE 1SS119-25	
D614	8-719-911-19	DIODE 1SS119-25	
D615	8-719-911-19	DIODE 1SS119-25	
D618	8-719-404-49	DIODE MA111	
D619	8-719-158-15	ZENER DIODE RD5.6SB	
D621	8-719-158-15	ZENER DIODE RD5.6SB	
D622	8-719-158-15	ZENER DIODE RD5.6SB	
D623	8-719-158-49	ZENER DIODE RD12SB2	
D624	8-719-404-49	DIODE MA111	
D650	8-719-510-46	DIODE D1NL20	
D651	8-719-510-46	DIODE D1NL20	
D652	8-719-510-46	DIODE D1NL20	
D653	8-719-510-46	DIODE D1NL20	
D654	8-719-052-90	DIODE D1NL40-TA2	
D655	8-719-500-70	DIODE D5S4M	
D656	8-719-500-70	DIODE D5S4M	
D657	8-719-500-70	DIODE D5S4M	
D658	8-719-052-91	DIODE D4SBS4-F	
D662	8-719-064-37	DIODE R2KS	
D670	8-719-911-19	DIODE 1SS119-25	
D671	8-719-911-19	DIODE 1SS119-25	
D701	8-719-158-15	ZENER DIODE RD5.6SB	
D704	8-719-404-49	DIODE MA111	
D901	8-719-404-49	DIODE MA111	
D902	8-719-158-15	ZENER DIODE RD5.6SB	
D903	8-719-404-49	DIODE MA111	
D904	8-719-404-49	DIODE MA111	
D905	8-719-404-49	DIODE MA111	
D906	8-719-404-49	DIODE MA111	
D907	8-719-404-49	DIODE MA111	
D908	8-719-404-49	DIODE MA111	
D909	8-719-158-15	ZENER DIODE RD5.6SB	
D910	8-719-158-15	ZENER DIODE RD5.6SB	
D911	8-719-404-49	DIODE MA111	
D912	8-719-045-19	DIODE SPB-26MVWF	
D914	8-719-404-49	DIODE MA111	
D915	8-719-404-49	DIODE MA111	
D916	8-719-404-49	DIODE MA111	
D917	8-719-404-49	DIODE MA111	
D918	8-719-158-15	ZENER DIODE RD5.6SB	
D919	8-719-158-15	ZENER DIODE RD5.6SB	
D920	8-719-986-73	DIODE RB441Q	
D922	8-719-404-49	DIODE MA111	
D924	8-719-404-49	DIODE MA111	
D925	8-719-404-49	DIODE MA111	
D935	8-719-404-49	DIODE MA111	
D936	8-719-404-49	DIODE MA111	
D937	8-719-404-49	DIODE MA111	
D938	8-719-311-90	DIODE SEL1922D-C	
D939	8-719-986-73	DIODE RB441Q	
		<FUSE>	
F601 ⚠	1-576-231-11	FUSE (H.B.C.) (4A/250V)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-533-223-11	HOLDER, FUSE ; F601	
		<FERRITE BEAD>	
FB502	1-410-396-41	FERRITE 0.45UH	
FB503	1-410-396-41	FERRITE 0.45UH	
FB504	1-412-911-11	FERRITE 1.1UH	
FB506	1-412-911-11	FERRITE 1.1UH	
FB602	1-412-911-11	FERRITE 1.1UH	
FB903	1-410-396-41	FERRITE 0.45UH	
JW166	1-410-396-41	FERRITE 0.45UH	
		<TERMINAL>	
GT001*	1-537-738-21	TERMINAL, EARTH	
		<IC>	
IC401	8-759-444-83	IC LA7840L	
IC501⚠	8-759-478-76	IC uPC5021-109	
IC502	8-759-803-42	IC LA6500-FA	
IC503	8-759-803-42	IC LA6500-FA	
IC602	8-759-701-88	IC NJM7912FA	
IC603	8-759-450-47	IC BA05T	
IC604	8-759-513-72	IC PQ12RF11	
IC605	8-749-010-64	PHOTO COUPLER PC123F2	
IC611	8-749-012-13	IC DM-58	
IC612	8-749-013-76	IC PQ6RD83B	
IC701	8-759-478-66	IC CXA8070P	
IC702	8-749-014-32	IC STK392-910A	
IC900	8-759-525-10	IC TC7SET08F(TE85L)	
IC901	8-759-541-29	IC ST72751N9B1/LAM	
IC902	8-759-537-27	IC CXA8071AP	
IC904	8-759-165-80	IC PST600C-T	
IC905	8-759-527-71	IC M24C08-BN6	
		<CHIP CONDUCTOR>	
JR002	1-216-296-91	SHORT 0	
JR003	1-216-295-91	SHORT 0	
JR004	1-216-296-91	SHORT 0	
JR005	1-216-296-91	SHORT 0	
JR006	1-216-296-91	SHORT 0	
JR007	1-216-296-91	SHORT 0	
JR008	1-216-295-91	SHORT 0	
JR009	1-216-296-91	SHORT 0	
JR010	1-216-295-91	SHORT 0	
JR011	1-216-296-91	SHORT 0	
JR012	1-216-296-91	SHORT 0	
JR013	1-216-296-91	SHORT 0	
JR014	1-216-296-91	SHORT 0	
JR015	1-216-296-91	SHORT 0	
JR019	1-216-295-91	SHORT 0	
JR020	1-216-295-91	SHORT 0	
JR021	1-216-295-91	SHORT 0	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>	
L501	1-412-531-31	INDUCTOR 33UH	
L502	1-412-531-31	INDUCTOR 33UH	
L503	1-411-594-41	COIL, CHOKE 5mmH	
L506	1-412-545-11	INDUCTOR 470UH	
L509	1-416-860-11	COIL, HORIZONTAL LINEARITY	
L510	1-416-367-11	COIL, HORIZONTAL CENTER	
L601	1-406-663-21	COIL, CHOKE 47UH	
L602 ⚠	1-412-529-41	INDUCTOR 22UH	
L603	1-412-537-31	INDUCTOR 100UH	
L650	1-412-529-11	INDUCTOR 22UH	
L651	1-410-645-31	INDUCTOR 100UH	
L652	1-412-529-11	INDUCTOR 22UH	
L653	1-412-529-11	INDUCTOR 22UH	
L901	1-412-537-31	INDUCTOR 100UH	
		<FILTER>	
LF601⚠	1-429-180-11	TRANSFORMER, LINE FILTER	
		<IC LINK>	
PS600⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	
PS601⚠	1-532-727-91	LINK, IC (0.25A/150V)	
		<TRANSISTOR>	
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q502	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q503	8-729-015-28	TRANSISTOR IRFI9630GS	
Q504	8-729-031-89	TRANSISTOR 2SC3941A-Q(TA)	
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q506	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q507	8-729-041-29	TRANSISTOR BU2522AX-ON5008	
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q509	8-729-043-28	TRANSISTOR PDTC124EK-115	
Q510	8-729-042-42	TRANSISTOR 2SK2101-01MR-F141	
Q511	8-729-042-34	TRANSISTOR IRFU110A	
Q512	8-729-041-95	TRANSISTOR IRLI540GLF33	
Q515	8-729-041-95	TRANSISTOR IRLI540GLF33	
Q516	8-729-041-93	TRANSISTOR IRLI530GLF33	
Q517	8-729-326-11	TRANSISTOR 2SC2611	
Q518	8-729-140-50	TRANSISTOR 2SC3209LK	
Q520	8-729-015-28	TRANSISTOR IRFI9630GS	
Q521	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q522	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q602	8-729-037-98	TRANSISTOR 2SK2194F08	
Q603	8-729-043-33	TRANSISTOR PDTA124EK-115	
Q604	8-729-043-28	TRANSISTOR PDTC124EK-115	
Q605	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q606	8-729-041-93	TRANSISTOR IRLI530GLF33	
Q607	8-729-209-15	TRANSISTOR 2SD2012	
Q608	8-729-039-65	TRNSISTOR MX0541B-F	
Q609	8-729-043-33	TRANSISTOR PDTA124EK-115	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
Q610	8-729-322-37	TRANSISTOR 2SJ175				
Q611	8-729-043-28	TRANSISTOR PDTC124EK-115				
Q654	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q670	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q671	8-729-200-17	TRANSISTOR 2SA1091-O				
Q672	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q673	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
Q901	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q902	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q903	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q904	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q905	8-729-900-51	TRANSISTOR DTA114TK				
		<RESISTOR>				
JW105	1-247-807-31	CARBON	100	5%	1/4W	
R401	1-249-383-11	CARBON	1.5	5%	1/4W	F
R402	1-215-866-11	METAL OXIDE	330	5%	1W	F
R403	1-214-796-00	METAL	1.5	1%	1/2W	
R404	1-215-443-00	METAL	8.2K	1%	1/4W	
R405	1-214-796-00	METAL	1.5	1%	1/2W	
R406	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R407	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R408	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R409	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R410	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R411	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R412	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R451	1-215-451-00	METAL	18K	1%	1/4W	
R452	1-215-421-00	METAL	1K	1%	1/4W	
R453	1-215-445-00	METAL	10K	1%	1/4W	
R454	1-215-445-00	METAL	10K	1%	1/4W	
R455	1-218-762-11	METAL CHIP	270K	0.50%	1/10W	
R498	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R500	1-249-377-11	CARBON	0.47	5%	1/4W	F
R501	1-247-807-31	CARBON	100	5%	1/4W	
R502	1-216-103-00	RES,CHIP	180K	5%	1/10W	
R503	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R504	1-249-377-11	CARBON	0.47	5%	1/4W	F
R505	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R506	1-215-481-00	METAL	330K	1%	1/4W	
R507	1-215-427-00	METAL	1.8K	1%	1/4W	
R508	1-247-807-31	CARBON	100	5%	1/4W	
R509	1-247-863-91	CARBON	22K	5%	1/4W	
R510	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R511	1-249-381-11	CARBON	1	5%	1/4W	F
R512	1-249-389-11	CARBON	4.7	5%	1/4W	
R513	1-215-888-00	METAL OXIDE	220	5%	2W	F
R514	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R515	1-215-423-00	METAL	1.2K	1%	1/4W	
R516	9-910-999-31	METAL	150	1%	1/2W	
R517	1-216-393-00	METAL OXIDE	2.2	5%	3W	F
R518	1-216-393-00	METAL OXIDE	2.2	5%	3W	F
R519	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R520	1-249-397-11	CARBON	22	5%	1/4W	F

REF.NO.	PART NO.	DESCRIPTION				REMARK
R522	1-249-401-11	CARBON	47	5%	1/4W	
R523	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R525	1-249-417-11	CARBON	1K	5%	1/4W	F
R526	1-249-425-11	CARBON	4.7K	5%	1/4W	
R527	1-249-429-11	CARBON	10K	5%	1/4W	
R528	1-247-863-91	CARBON	22K	5%	1/4W	
R529	1-249-429-11	CARBON	10K	5%	1/4W	F
R530	1-216-474-11	METAL OXIDE	82	5%	3W	F
R531	1-216-474-11	METAL OXIDE	82	5%	3W	F
R532	1-249-385-11	CARBON	2.2	5%	1/4W	F
R533	1-249-417-11	CARBON	1K	5%	1/4W	F
R534	1-249-405-11	CARBON	100	5%	1/4W	F
R535	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R536	1-249-417-11	CARBON	1K	5%	1/4W	F
R537	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R538	1-215-905-11	METAL OXIDE	10	5%	3W	F
R539	1-215-905-11	METAL OXIDE	10	5%	3W	F
R540 ⚠	1-215-476-91	METAL	200K	1%	1/4W	
R541	1-215-421-00	METAL	1K	1%	1/4W	
R542	1-215-421-00	METAL	1K	1%	1/4W	
R543	1-249-389-11	CARBON	4.7	5%	1/4W	F
R544	1-215-493-00	METAL	1M	1%	1/4W	
R545	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R546	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R547	1-215-482-00	METAL	360K	1%	1/4W	
R548	1-215-423-00	METAL	1.2K	1%	1/4W	
R549	1-215-462-00	METAL	51K	1%	1/4W	
R550	1-215-423-00	METAL	1.2K	1%	1/4W	
R551	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R552	1-215-463-00	METAL	56K	1%	1/4W	
R553	1-216-699-11	METAL CHIP	100K	0.50%	1/10W	
R554	1-218-756-11	METAL CHIP	150K	0.50%	1/10W	
R556	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R557	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R558	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R559	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	
R560	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R561	1-216-474-11	METAL OXIDE	82	5%	3W	F
R562	1-215-447-00	METAL	12K	1%	1/4W	
R563	1-249-383-11	CARBON	1.5	5%	1/4W	F
R564	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R565	1-215-481-00	METAL	330K	1%	1/4W	
R566	1-215-859-00	METAL OXIDE	22	5%	1W	F
R567	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R568	1-249-437-11	CARBON	47K	5%	1/4W	
R569	1-216-635-11	METAL CHIP	220	0.50%	1/10W	
R570	1-249-417-11	CARBON	1K	5%	1/4W	
R571	1-215-926-00	METAL OXIDE	33K	5%	3W	F
R572	1-249-437-11	CARBON	47K	5%	1/4W	
R573	1-247-887-00	CARBON	220K	5%	1/4W	
R577	1-215-888-00	METAL OXIDE	220	5%	2W	F
R578	1-216-447-00	METAL OXIDE	27	5%	2W	F
R579	1-247-887-00	CARBON	220K	5%	1/4W	
R580	1-216-077-00	RES,CHIP	15K	5%	1/10W	
R581	1-249-429-11	CARBON	10K	5%	1/4W	
R582	1-249-397-11	CARBON	22	5%	1/4W	F

D

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R583	1-216-073-00	RES,CHIP	10K	5%	1/10W
R584	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R585	1-260-099-11	CARBON	1K	5%	1/2W
R586	1-260-103-11	CARBON	2.2K	5%	1/2W
R587	1-216-049-91	RES,CHIP	1K	5%	1/10W
R589	1-249-425-11	CARBON	4.7K	5%	1/4W
R590	1-215-453-00	METAL	22K	1%	1/4W
R591	1-216-073-00	RES,CHIP	10K	5%	1/10W
R594	1-215-493-00	METAL	1M	1%	1/4W
R595	9-910-999-31	METAL	150	1%	1/2W
R596	1-249-421-11	CARBON	2.2K	5%	1/4W
R597	1-249-377-11	CARBON	0.47	5%	1/4W F
R598	1-216-049-91	RES,CHIP	1K	5%	1/10W
R599	1-249-377-11	CARBON	0.47	5%	1/4W F
R600	1-249-421-11	CARBON	2.2K	5%	1/4W
R601	1-216-049-91	RES,CHIP	1K	5%	1/10W
R602 ⚠	1-205-998-11	CEMENTED	1	5%	10W
R603	1-218-642-11	METAL OXIDE	100K	5%	1W F
R604	1-249-429-11	CARBON	10K	5%	1/4W
R605	1-249-437-11	CARBON	47K	5%	1/4W
R606	1-249-393-11	CARBON	10	5%	1/4W F
R607 ⚠	1-202-882-91	SOLID	560K	20%	1/2W
R608	1-249-389-11	CARBON	4.7	5%	1/4W F
R609	1-216-073-00	RES,CHIP	10K	5%	1/10W
R610	1-216-381-11	METAL OXIDE	0.22	5%	3W F
R611	1-216-049-91	RES,CHIP	1K	5%	1/10W
R614	1-249-377-11	CARBON	0.47	5%	1/4W F
R615	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R616	1-216-073-00	RES,CHIP	10K	5%	1/10W
R617	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R619	1-215-481-00	METAL	330K	1%	1/4W
R620	1-216-049-91	RES,CHIP	1K	5%	1/10W
R622	9-910-999-31	METAL	150	1%	1/2W
R623	1-215-482-00	METAL	360K	1%	1/4W
R624	1-215-479-00	METAL	270K	1%	1/4W
R625	1-215-481-00	METAL	330K	1%	1/4W
R626	1-216-081-00	RES,CHIP	22K	5%	1/10W
R627	1-215-481-00	METAL	330K	1%	1/4W
R628	1-215-481-00	METAL	330K	1%	1/4W
R629	1-215-461-00	METAL	47K	1%	1/4W
R630	1-249-421-11	CARBON	2.2K	5%	1/4W
R631	1-218-642-11	METAL OXIDE	100K	5%	1W F
R632	1-218-642-11	METAL OXIDE	100K	5%	1W F
R633	1-216-073-00	RES,CHIP	10K	5%	1/10W
R634	1-218-642-11	METAL OXIDE	100K	5%	1W F
R636	1-249-389-11	CARBON	4.7	5%	1/4W
R637	1-249-389-11	CARBON	4.7	5%	1/4W
R638	1-247-791-91	CARBON	22	5%	1/4W
R639	1-247-791-91	CARBON	22	5%	1/4W
R640	1-220-926-11	FUSIBLE	0.47	10%	1/2W F
R641	1-216-089-91	RES,CHIP	47K	5%	1/10W
R642	1-247-807-31	CARBON	100	5%	1/4W
R643	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R644	1-216-081-00	RES,CHIP	22K	5%	1/10W
R645	1-216-073-00	RES,CHIP	10K	5%	1/10W
R646	1-216-073-00	RES,CHIP	10K	5%	1/10W
R650	1-249-377-11	CARBON	0.47	5%	1/4W F
R651	1-249-377-11	CARBON	0.47	5%	1/4W F
R652	1-249-377-11	CARBON	0.47	5%	1/4W F
R653	1-249-381-11	CARBON	1	5%	1/4W F
R654	1-249-377-11	CARBON	0.47	5%	1/4W F
R655	1-249-377-11	CARBON	0.47	5%	1/4W F
R660	1-249-430-11	CARBON	12K	5%	1/4W F
R661	1-249-417-11	CARBON	1K	5%	1/4W
R662	1-247-895-91	CARBON	470K	5%	1/4W
R666	1-216-073-00	RES,CHIP	10K	5%	1/10W
R667	1-249-429-11	CARBON	10K	5%	1/4W
R669	1-249-425-11	CARBON	4.7K	5%	1/4W
R670	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R671	1-249-425-11	CARBON	4.7K	5%	1/4W
R674	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R675	1-215-477-00	METAL	220K	1%	1/4W
R676	1-216-049-91	RES,CHIP	1K	5%	1/10W
R677	1-247-883-00	CARBON	150K	5%	1/4W
R678	1-247-895-91	CARBON	470K	5%	1/4W
R679	1-216-073-00	RES,CHIP	10K	5%	1/10W
R680	1-216-073-00	RES,CHIP	10K	5%	1/10W
R681	1-216-073-00	RES,CHIP	10K	5%	1/10W
R701	1-216-025-91	RES,CHIP	100	5%	1/10W
R702	1-216-025-91	RES,CHIP	100	5%	1/10W
R703	1-260-092-11	CARBON	270	5%	1/2W
R704	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R705	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R706	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R707	1-215-445-00	METAL	10K	1%	1/4W
R708	1-215-445-00	METAL	10K	1%	1/4W
R709	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R710	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R711	1-216-346-00	METAL OXIDE	0.56	5%	1W F
R712	1-215-863-11	METAL OXIDE	100	5%	1W F
R713	1-216-349-00	METAL OXIDE	1	5%	1W F
R716	1-215-863-11	METAL OXIDE	100	5%	1W F
R717	1-216-353-00	METAL OXIDE	2.2	5%	1W F
R718	1-215-863-11	METAL OXIDE	100	5%	1W F
R719	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R724	1-216-423-11	METAL OXIDE	27	5%	1W F
R727	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R728	1-215-863-11	METAL OXIDE	100	5%	1W F
R729	1-216-353-00	METAL OXIDE	2.2	5%	1W F
R730	1-216-422-11	METAL OXIDE	18	5%	1W F
R901	1-247-807-31	CARBON	100	5%	1/4W
R902	1-216-025-91	RES,CHIP	100	5%	1/10W
R903	1-216-049-91	RES,CHIP	1K	5%	1/10W
R904	1-216-049-91	RES,CHIP	1K	5%	1/10W
R905	1-216-025-91	RES,CHIP	100	5%	1/10W
R906	1-216-073-00	RES,CHIP	10K	5%	1/10W
R907	1-260-087-11	CARBON	100	5%	1/2W
R908	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R909	1-216-648-11	METAL CHIP	750	0.50%	1/10W
R910	1-216-033-00	RES,CHIP	220	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R911	1-216-041-00	RES,CHIP	470	5%	1/10W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-247-807-31	CARBON	100	5%	1/4W
R914	1-216-025-91	RES,CHIP	100	5%	1/10W
R915	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R916	1-216-077-00	RES,CHIP	15K	5%	1/10W
R917	1-216-077-00	RES,CHIP	15K	5%	1/10W
R918	1-216-049-91	RES,CHIP	1K	5%	1/10W
R919	1-247-807-31	CARBON	100	5%	1/4W
R920	1-216-049-91	RES,CHIP	1K	5%	1/10W
R921	1-216-025-91	RES,CHIP	100	5%	1/10W
R922	1-216-073-00	RES,CHIP	10K	5%	1/10W
R924	1-247-807-31	CARBON	100	5%	1/4W
R925	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R926	1-216-295-91	SHORT	0		
R927	1-216-295-91	SHORT	0		
R928	1-216-025-91	RES,CHIP	100	5%	1/10W
R929	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R930	1-216-025-91	RES,CHIP	100	5%	1/10W
R931	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R932	1-216-025-91	RES,CHIP	100	5%	1/10W
R933	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R934	1-216-073-00	RES,CHIP	10K	5%	1/10W
R935	1-216-025-91	RES,CHIP	100	5%	1/10W
R936	1-216-025-91	RES,CHIP	100	5%	1/10W
R937	1-216-049-91	RES,CHIP	1K	5%	1/10W
R938	1-216-025-91	RES,CHIP	100	5%	1/10W
R939	1-216-637-11	METAL CHIP	270	0.50%	1/10W
R940	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R941	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R942	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R943	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R944	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R945	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R946	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R947	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R948	1-216-025-91	RES,CHIP	100	5%	1/10W
R949	1-216-073-00	RES,CHIP	10K	5%	1/10W
R951	1-216-025-91	RES,CHIP	100	5%	1/10W
R952	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R953	1-216-073-00	RES,CHIP	10K	5%	1/10W
R954	1-216-073-00	RES,CHIP	10K	5%	1/10W
R956	1-216-025-91	RES,CHIP	100	5%	1/10W
R957	1-249-401-11	CARBON	47	5%	1/4W
R958	1-249-401-11	CARBON	47	5%	1/4W
R959	1-216-073-00	RES,CHIP	10K	5%	1/10W
R960	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R961	1-249-413-11	CARBON	470	5%	1/4W
R962	1-216-295-91	SHORT	0		
R975	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

<VARIABLE RESISTOR>

⧓ RV501⚠1-241-767-21RES, ADJ, CERMET 100K (HV ADJ)
3-710-578-01COVER, VOLUME, 6 MOLD ; RV501

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<RELAY>	
RY601	1-755-031-11	RELAY	
		<SWITCH>	
S601 ⚠	1-571-433-31	SWITCH, PUSH (AC POWER)	
S901	1-692-431-21	SWITCH, TACTILE (CONT+)	
S903	1-692-431-21	SWITCH, TACTILE (VOLUME+)	
S904	1-692-431-21	SWITCH, TACTILE (VOLUME-)	
S905	1-692-431-21	SWITCH, TACTILE (GPE)	
S906	1-692-431-21	SWITCH, TACTILE (RESET)	
S907	1-692-431-21	SWITCH, TACTILE (MUTE)	
S910	1-692-431-21	SWITCH, TACTILE (CONT-)	
S911	1-692-431-21	SWITCH, TACTILE (MENU)	
		<SPARK GAP>	
SG501	1-519-422-11	GAP, SPARK	
		<TRANSFORMER>	
T501 ⚠	X-4036-234-1	TRANSFORMER ASSY, FLYBACK	(NX-4402//J1K4)
T503	1-429-109-11	TRANSFORMER, FERRITE (DFT)	
T504	1-429-103-11	TRANSFORMER, FERRITE (HDT)	
T505	1-426-998-11	TRANSFORMER, FERRITE (HST)	
T601	1-416-286-21	COIL, CHOKE 515UH	
T602 ⚠	1-431-386-11	TRANSFORMER, CONVERTER (PIT)	
T603	1-429-992-11	TRANSFORMER, CONVERTER (PRT)	
		<THERMISTOR>	
TH401	1-803-114-11	THERMISTOR, POSITIVE	
TH501	1-807-796-11	THERMISTOR	
TH601⚠	1-810-990-11	THERMISTOR	
TH602	1-809-827-11	THERMISTOR, POSITIVE	
		<VARISTOR>	
VA601	1-810-622-11	VARISTOR	
VA602⚠	1-801-268-51	VARISTOR TNR14V471K660	
		<CRYSTAL>	
X901	1-767-641-11	VIBRATOR, CRYSTAL	
X902	1-767-933-11	OSCILLATOR, CERAMIC	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
*	8-933-240-00	DA BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C1608	1-163-275-11	CERAMIC CHIP 0.001MF	5%	50V	
C1609	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1610	1-163-005-11	CERAMIC CHIP 470PF	10%	50V	
C1611	1-163-003-11	CERAMIC CHIP 330PF	10%	50V	
C1612	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
C1615	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1616	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
C1618	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1626	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
		<CONNECTOR>			
CN1600*	1-774-512-11	CONNECTOR, BPARD TO BOARD 10P			
		<DIODE>			
D1604	8-719-977-81	ZENER DIODE DTZ33B			
D1605	8-719-056-95	ZENER DIODE UDZ-TE-17-22B			
D1610	8-719-404-49	DIODE MA111			
		<IC>			
IC1601	8-759-462-65	IC TK75003D			
IC1603	8-759-198-31	IC uPC1093J-1-T			
		<CHIP CONDUCTOR>			
JR1601	1-216-295-91	SHORT 0			
JR1602	1-216-295-91	SHORT 0			
		<TRANSISTOR>			
Q1603	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1604	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1605	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1606	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R1603	1-216-673-11	METAL CHIP 8.2K	0.50%	1/10W	
R1607	1-216-105-91	RES,CHIP 220K	5%	1/10W	
R1608	1-216-017-91	RES,CHIP 47	5%	1/10W	
R1609	1-216-065-91	RES,CHIP 4.7K	5%	1/10W	
R1611	1-216-081-00	RES,CHIP 22K	5%	1/10W	
R1614	1-216-089-91	RES,CHIP 47K	5%	1/10W	
R1615	1-216-089-91	RES,CHIP 47K	5%	1/10W	
R1620	1-216-073-00	RES,CHIP 10K	5%	1/10W	
R1621	1-216-671-11	METAL CHIP 6.8K	0.50%	1/10W	
R1622	1-216-073-00	RES,CHIP 10K	5%	1/10W	
R1623	1-216-057-00	RES,CHIP 2.2K	5%	1/10W	
R1624	1-216-057-00	RES,CHIP 2.2K	5%	1/10W	
R1641	1-216-073-00	RES,CHIP 10K	5%	1/10W	

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*	A-1373-698-A	U BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+) (IC5201)			
		<CAPACITOR>			
C5021	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5022	1-126-965-11	ELECT 22MF	20%	50V	
C5202	1-126-964-11	ELECT 10MF	20%	50V	
C5203	1-126-964-11	ELECT 10MF	20%	50V	
C5205	1-107-698-11	ELECT 10MF	20%	25V	
C5206	1-107-698-11	ELECT 10MF	20%	25V	
C5207	1-164-695-11	CERAMIC CHIP 0.0022MF	5%	50V	
C5208	1-164-695-11	CERAMIC CHIP 0.0022MF	5%	50V	
C5209	1-164-344-11	CERAMIC CHIP 0.068MF	10%	25V	
C5210	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C5211	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C5212	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5213	1-126-965-11	ELECT 22MF	20%	50V	
C5214	1-104-664-11	ELECT 47MF	20%	25V	
C5215	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
C5217	1-163-989-11	CERAMIC CHIP 0.033MF	10%	25V	
C5218	1-104-663-11	ELECT 33MF	20%	25V	
C5219	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5220	1-164-344-11	CERAMIC CHIP 0.068MF	10%	25V	
C5221	1-126-941-11	ELECT 470MF	20%	25V	
C5223	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
C5230	1-104-664-11	ELECT 47MF	20%	10V	
C5236	1-104-664-11	ELECT 47MF	20%	16V	
C5240	1-126-964-11	ELECT 10MF	20%	50V	
C5257	1-126-960-11	ELECT 1MF	20%	50V	
C5258	1-104-664-11	ELECT 47MF	20%	16V	
C5260	1-125-959-11	ELECT CHIP 2200MF	20%	25V	
C5263	1-125-959-11	ELECT CHIP 2200MF	20%	25V	
C5264	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5266	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5275	1-136-165-00	FILM 0.1MF	5%	50V	
C5276	1-136-165-00	FILM 0.1MF	5%	50V	
C5279	1-164-344-11	CERAMIC CHIP 0.068MF	10%	25V	
C5280	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C5281	1-164-344-11	CERAMIC CHIP 0.068MF	10%	25V	
C5282	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C5283	1-126-963-11	ELECT 4.7MF	20%	50V	
C5284	1-126-963-11	ELECT 4.7MF	20%	50V	
C5285	1-126-964-11	ELECT 10MF	20%	50V	
C5296	1-163-038-91	CERAMIC CHIP 0.1MF		25V	
C5297	1-104-664-11	ELECT 47MF	20%	25V	
C5298	1-126-964-11	ELECT 10MF	20%	50V	
C5303	1-126-963-11	ELECT 4.7MF	20%	50V	
C5304	1-126-963-11	ELECT 4.7MF	20%	50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION				REMARK
C5310	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V	
C5402	1-126-964-11	ELECT	10MF	20%	50V	
C5403	1-126-960-11	ELECT	1MF	20%	50V	
C5405	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V	
C5616	1-126-964-11	ELECT	10MF	20%	50V	
C5620	1-125-960-11	ELECT	4700MF	20%	25V	
		<CONNECTOR>				
CN5200*	1-564-506-11	PLUG, CONNECTOR 3P				
CN5202*	1-564-508-11	PLUG, CONNECTOR 5P				
CN5204*	1-564-509-11	PLUG, CONNECTOR 6P				
CN5601*	1-564-508-11	PLUG, CONNECTOR 5P				
CN5605	1-695-915-11	TAB (CONTACT)				
CN5606	1-695-915-11	TAB (CONTACT)				
CN5607	1-695-915-11	TAB (CONTACT)				
		<DIODE>				
D5200	8-719-404-49	DIODE MA111				
D5201	8-719-404-49	DIODE MA111				
D5202	8-719-404-49	DIODE MA111				
D5203	8-719-404-49	DIODE MA111				
D5204	8-719-404-49	DIODE MA111				
D5205	8-719-510-46	DIODE D1NL20				
D5206	8-719-404-49	DIODE MA111				
D5211	8-719-404-49	DIODE MA111				
D5212	8-719-404-49	DIODE MA111				
D5401	8-719-977-28	ZENER DIODE DTZ10B				
D5402	8-719-404-49	DIODE MA111				
D5403	8-719-404-49	DIODE MA111				
D5404	8-719-404-49	DIODE MA111				
D5601	8-719-404-49	DIODE MA111				
D5602	8-719-404-49	DIODE MA111				
D5608	8-719-404-49	DIODE MA111				
		<IC>				
IC5200	8-759-273-12	IC TDA7315D013TR				
IC5201	8-759-980-43	IC TDA2009A				
IC5202	8-759-100-96	IC uPC4558G2				
IC5204	8-759-100-96	IC uPC4558G2				
IC5601	8-759-168-19	IC TA78L09F-TE12L				
		<JACK>				
J5401	1-563-330-11	JACK				
		<CHIP CONDUCTOR>				
JR5201	1-216-296-91	SHORT	0			
		<FERRITE BEAD>				
JW5601	1-412-911-31	FERRITE	1.1UH			
		<COIL>				
L5201	1-410-435-21	INDUCTOR 220UH				
L5202	1-410-435-21	INDUCTOR 220UH				
		<IC LINK>				
PS5200	⚠1-532-984-91	LINK, IC (2A/90V AC, 60V DC)				
		<TRANSISTOR>				
Q5001	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q5201	8-729-216-22	TRANSISTOR 2SA1162-G				
Q5202	8-729-216-22	TRANSISTOR 2SA1162-G				
Q5205	8-729-216-22	TRANSISTOR 2SA1162-G				
Q5206	8-729-322-37	TRANSISTOR 2SJ175				
Q5207	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q5215	8-729-920-21	TRANSISTOR DTC314TK-T-146				
Q5216	8-729-920-21	TRANSISTOR DTC314TK-T-146				
Q5401	8-729-027-38	TRANSISTOR DTA144EKA-T146				
Q5402	8-729-920-21	TRANSISTOR DTC314TK-T-146				
		<RESISTOR>				
R5041	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R5042	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R5201	1-216-295-91	SHORT	0			
R5202	1-240-095-21	RES,CHIP	100K	5%	1/10W	
R5203	1-240-095-21	RES,CHIP	100K	5%	1/10W	
R5204	1-240-095-21	RES,CHIP	100K	5%	1/10W	
R5205	1-240-095-21	RES,CHIP	100K	5%	1/10W	
R5206	1-240-099-21	RES,CHIP	220K	5%	1/10W	
R5207	1-240-103-21	RES,CHIP	470K	5%	1/10W	
R5208	1-240-099-21	RES,CHIP	220K	5%	1/10W	
R5209	1-240-103-21	RES,CHIP	470K	5%	1/10W	
R5210	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5211	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5213	1-216-295-91	SHORT	0			
R5214	1-249-377-11	CARBON	0.47	5%	1/4W	F
R5216	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R5217	1-216-025-91	RES,CHIP	100	5%	1/10W	
R5218	1-216-017-91	RES,CHIP	47	5%	1/10W	
R5219	1-240-082-21	RES,CHIP	8.2K	5%	1/10W	
R5222	1-216-025-91	RES,CHIP	100	5%	1/10W	
R5223	1-240-082-21	RES,CHIP	8.2K	5%	1/10W	
R5225	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R5229	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5230	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5232	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5233	1-216-651-11	RES,CHIP	1K	5%	1/10W	
R5239	1-216-295-91	SHORT	0			
R5241	1-240-072-21	RES,CHIP	1.2K	5%	1/10W	
R5246	1-249-389-11	CARBON	4.7	5%	1/4W	F
R5252	1-249-389-11	CARBON	4.7	5%	1/4W	F
R5258	1-216-295-91	SHORT	0			
R5269	1-216-089-91	RES,CHIP	47K	5%	1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R5270	1-216-093-00	RES,CHIP	68K	5%	1/10W
R5271	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5272	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5276	1-216-659-11	RES,CHIP	2.2K	5%	1/10W
R5277	1-216-659-11	RES,CHIP	2.2K	5%	1/10W
R5281	1-240-091-21	RES,CHIP	47K	5%	1/10W
R5282	1-240-091-21	RES,CHIP	47K	5%	1/10W
R5283	1-216-683-11	RES,CHIP	22K	5%	1/10W
R5284	1-216-683-11	RES,CHIP	22K	5%	1/10W
R5298	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5299	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5300	1-216-675-11	RES,CHIP	10K	5%	1/10W
R5301	1-216-675-11	RES,CHIP	10K	5%	1/10W
R5303	1-216-295-91	SHORT	0		
R5304	1-216-295-91	SHORT	0		
R5306	1-216-659-11	RES,CHIP	2.2K	5%	1/10W
R5307	1-216-659-11	RES,CHIP	2.2K	5%	1/10W
R5309	1-240-052-21	RES,CHIP	27	5%	1/10W
R5310	1-240-072-21	RES,CHIP	1.2K	5%	1/10W
R5311	1-240-052-21	RES,CHIP	27	5%	1/10W
R5325	1-216-675-11	RES,CHIP	10K	5%	1/10W
R5326	1-216-675-11	RES,CHIP	10K	5%	1/10W
R5328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5401	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5402	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5403	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5404	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5406	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5407	1-216-295-91	SHORT	0		
R5408	1-216-295-91	SHORT	0		

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REF.NO.	PART NO.	DESCRIPTION			REMARK
	*1-669-820-11	J BOARD			
		**********			
		<CAPACITOR>			
C6001	1-115-339-11	CERAMIC CHIP 0.1MF		10%	50V
		<CONNECTOR>			
CN6001	1-695-915-11	TAB (CONTACT)			
CN6002	*1-564-508-11	PLUG, CONNECTOR 5P			
CN6003	*1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D6000	8-719-404-49	DIODE MA111			
D6001	8-719-404-49	DIODE MA111			
		<JACK>			
J6002	1-568-267-11	JACK			
		<TRANSISTOR>			
Q6001	8-729-920-21	TRANSISTOR DTC314TK-T-146			
Q6002	8-729-920-21	TRANSISTOR DTC314TK-T-146			
		<RESISTOR>			
R6000	1-215-863-11	METAL OXIDE	100	5%	1W F
R6001	1-215-863-11	METAL OXIDE	100	5%	1W F
R6002	1-249-397-11	CARBON	22	5%	1/4W F
R6003	1-249-397-11	CARBON	22	5%	1/4W F

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